

# NO MINE IN GÁLLOK

Ecocide and colonialism in Swedish-occupied Sápmi



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Ecocide and colonialism in Swedish-occupied Sápmi

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*Gállok and an approximate and possibly faulty map of Sápmi (in black)*

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*kolonialinfrastruktur.noblogs.org*

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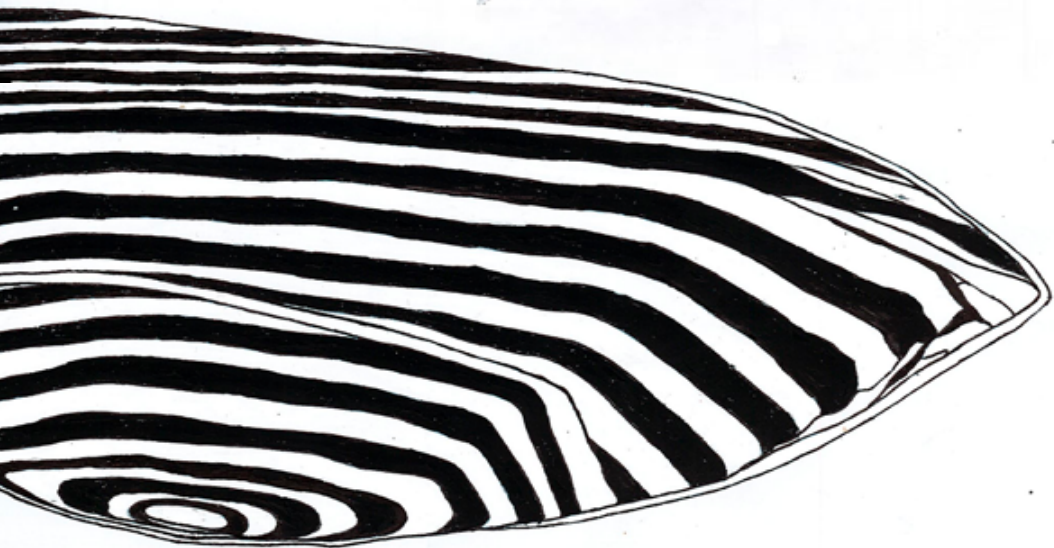
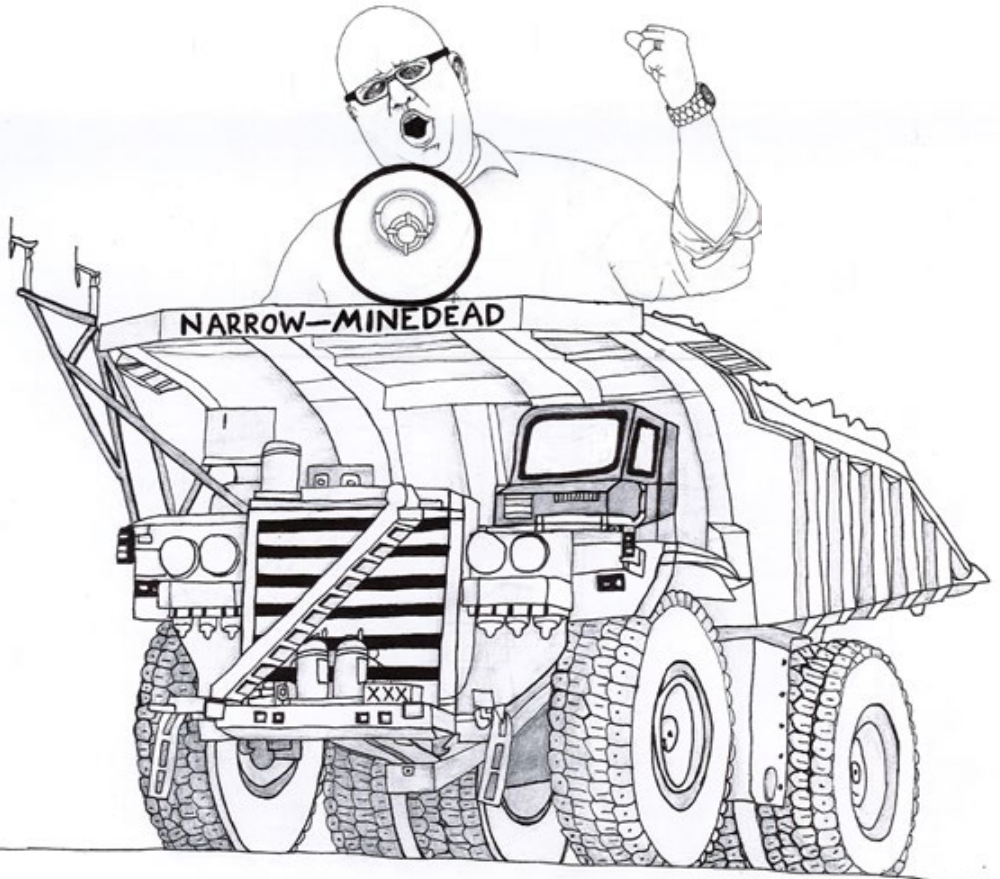
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**"WE LOOOVE MINES!"**  
- Viktig-Petter Snortalltsson

# INTRODUCTION

Gállok is the name of a place high up in the north of Scandinavia, north of the Arctic Circle. It is located in the boreal bioregion, with its once vast expanses of old growth forest stretching from the fells and mountains of what is nowadays the Swedish-Norwegian border down to the Gulf of Bothnia. It is a landscape of coniferous woodland, Scots pine and Norway spruce interspersed with birches, rowan, aspen and willow, ericaceous and berry shrubs, mosses and lichen, mires, lakes, and wide rivers once teeming with salmon.

The people who called this place Gállok, or Gállokjávrre ('the lake of Gállok'), did not think of the mountain range that runs like a spine along the Scandinavian peninsula as the Swedish-Norwegian border. Their geography was neither defined by State boundaries nor by our contemporary rights of private property. Here place names refer to the topography, not to persons – people felt that they belong to the land, not that they own the land.

Yet since the advent of capitalism and the modern nation State complex half a millennium ago, Sápmi, the European subcontinent's northernmost region, has been steadily integrated into a colonial system by the several nation States laying claim upon the territory. The land and its indigenous inhabitants known as Sámi have been systematically subordinated to the needs of the southern nation States and foreign entrepreneurs in the course of an ongoing but largely unknown colonial history on Europe's own northern fringe.

A planned open-cast iron mine in Gállok is one of the most recent developments in that history. On the occasion of the tenth anniversary of a blockade and protest camp in Gállok, we have taken the initiative to look deeper into the matter and invite an audience at least as foreign to the region as the editors of this booklet to join us on an educational journey, taking Gállok as a focal point in a broader context of colonial and environmental issues.

In March 2022 the British prospection and investment company Beowulf Mining was granted permission to pursue an open-cast mining exploitation of Gállok. Test drillings establishing the quality of the iron ore have already been undertaken a decade ago. These test drillings spurred a first wave of direct resistance in the year of 2013, with a protest camp on site and a road-block obstructing the machinery.

At the time of writing further operations await the completion of the required environmental impact assessments, which is expected by the end of 2023. Approval is the usual outcome of these formal assessments but they can still be appealed at the Environmental Court. One of the Sámi communities in the region has also launched an appeal case at the Supreme Administrative Court of Sweden. When all bureaucratic hurdles have been overcome, Beowulf Mining can sell the mining concession to the highest bidder, allowing foreign investors to capitalize on the favourable investment conditions for mining on Swedish territory, on the previous and current Swedish governments' proclaimed love of mining, and, most importantly, on yet another episode in the centuries old history of land grabbing in Sápmi.

In recent years the severity of the global climate and environmental crisis and the plight of indigenous people worldwide have received increasing public attention – as well as the notion that both might indeed share underlying causes. Yet at the same time environmental degradation and neocolonial land grabbing continue unabated, also in Sápmi.

The aim of this booklet is to look into this history of land grabbing, colonial oppression and resource exploitation as these centuries old developments currently accelerate into a new phase of environmental devastation. The case study of choice is Gállok, but as will become apparent, it is far from an isolated case. Another example would be the widely published discovery of rare earth minerals in the Giron (Swedish: Kiruna) area in 2023 equally contributing to the image of Sápmi as a kind of Swedish Klondike.

Although the proposed open-cast iron mine in Gállok by the British enterprise Beowulf Mining is this booklet's point of departure, light will also be shed on the issue of clear-felling the last remnants of primeval boreal forest on Sweden's territory by State-owned company Sveaskog and private forestry corporations. Both of these instances of ecocide would, or already do, severely disrupt traditional land use practices, including reindeer herding, and they amount to a general non-consensual colonial exploitation of the Sámi's homeland. At stake is not only the future of Sámi ways of life but the integrity of a landscape that different groups have come to consider home over a long and complex history of culture contact and colonialism, the non-human life forms within it, and

the global interrelations beyond it.

Despite an increased interest in indigenous and colonial issues in this so-called postcolonial epoch, knowledge of the existence, life ways and ongoing marginalization of Europe's own indigenous population in Fennoscandia remains comparatively poor, blatantly so in the Nordic countries themselves. Media coverage prefers to focus on more dramatic instances of ecocide, racism and colonial oppression in countries whose governments can easily be vilified, such as Bolsonaro's Brazil, without urging introspection. For instance, within Sweden ignorance is widespread of the fact that the Swedish State up to this day has refused to ratify the Indigenous and Tribal People's Convention of the International Labour Organization, also known as ILO 169, which is supposed to safeguard free, prior and informed consent from indigenous people in questions of resource exploitation. The Nordic countries like to pride themselves on their supposed sense of social and environmental responsibility, meanwhile casting a blind eye on the devastation of Sápmi's boreal forests and the enormous carbon sink that is encompassed within them.

A red thread running through the current wave of ecological devastation is the green-washing propaganda designed to legitimize it all in a grand narrative of a so-called Green Transition. In Sápmi one can see how State policies and extractivist enterprises claiming to mitigate climate change in fact exacerbate ecological degradation. As the imminent threat of climate chaos is slowly finding resonance among Europe's privileged population, we see how this increasing awareness is instantaneously being instrumentalized to the end of legitimising new forms of ecological and colonial exploitation, employing the same logic and serving the same interests that began to fuel the climate crisis in the first place.

This, of course, is a global phenomenon that can only

## **Format of the text**

This booklet has grown out of a journey to Gállok and other parts of Sápmi by relative strangers to the area. It compiles a series of articles based on encounters and interviews with people within and without the region. Some of the material has been collected at a gathering organized on site to connect the local struggle to potential allies from the south. The publication can be seen as an elaboration

be understood within the context of the capitalist world-system's metabolism. The infringement upon indigenous lands driven by capitalist accumulative appetite emanating from the European core to extract wealth from far-off peripheries has a long and enduring history indeed. Innumerable cultures have been cast into oblivion, innumerable species pushed into extinction, as a diversity of human ecologies have been subsumed into the totalising capitalist world-system that keeps on crunching the living world into dead numbers on a spread-sheet. Although the greatest colonial havoc has been and continues to be wreaked on foreign continents, we believe that an intra-European case study can serve an educational purpose as to the fact that these processes, though in a different shape and guise, are ongoing also in Europe.

Moreover, given the rosy image of Sweden within the international perception and their (self-)ascribed role as a global role model, it seems important to shed light upon the colonial and global implications of the ongoing wholesale conversion of Sápmi into an arena for green-washed false solutions to the ever deepening global ecological crisis.

Already the Gállok case, before any digging has begun, has attracted more attention than many other exploitative operations in Sápmi. We believe that given its controversial nature, the arrogance with which it is pursued and the ever increasing pressure on the viability of Sámi livelihoods within Swedish territory, the case has potential to draw attention to the underlying colonial relationship and the overall ecocidal developments in the region. And from that attention can grow direct or indirect support for Sámi struggles against the Swedish State and foreign exploitative companies, both from within Swedish society and beyond.

intended to reach a wider audience than the one present at the gathering, which took place at a for many people far-off location. As such, the publication is explicitly aimed at an audience that is unacquainted with Sápmi and Sámi struggles. It does not intend to speak for 'the Sámi', nor should it be understood as an ethnography of 'the Sámi'. It merely intends to familiarize the reader with some particular issues



related to Sápmi and stimulate reflection and debate on general issues related to colonialism and ecocide.

Neither of the editors of this publication is Sámi; one of us can look back upon a long engagement with the Gállok struggle, the other one has a more distant relation to it. Although the interlocutors have different backgrounds, some of them Sámi, some of them southern Swedish, some of them mixed, all of the texts are aimed at gaining an understanding of ongoing developments in the region of Sápmi. Included are inhabitants of the villages adjacent to the Gállok site, reindeer herders and scholars. We have tried to strike a balance between offering space to locally embedded voices and more distant analytical voices that pull the case study into a more general perspective. We would have preferred to include more Sámi voices than is currently the case and have failed especially in getting more input from Sámi women. As such, this publication is far from a definitive overview but rather a humble contribution to ongoing attempts to bring Sámi matters into Swedish and international focus, adding to previous publications such as the recent anthology 'Let the River Flow', the bundle of interviews in 'Liberating Sápmi' as well as the work of Sámi scholars publishing in English such as Harald Gaski and May-Britt Öhman. We may also use this occasion to point at the recent doctoral thesis by Ina Knoblock called 'Writing-Weaving Sámi Feminisms: Stories and Conversations'.

The Gállok case is our point of entry around which especially the first chapters revolve (part I). Here people living in the direct vicinity of Gállok, and other activists against the mine, are heard. The next section (part II) broadens the perspective to acquaint the reader somewhat more profoundly with Sápmi, its history and present reality of colonial exploitation, including an in-depth interview with a reindeer herder. Part III addresses issues of ecocide from a natural science perspective, looking into water pollution, heavy metals toxification and the devastating effects of Swedish forestry. In the last part (IV) we leave Sápmi for two interviews undertaken in the south of Sweden with scholars of human ecology to discuss matters of technology, the promises of renewable energies, development and civilization so as to place the specificities of what we have discussed throughout the rest of the publication into a more general framework.

Complementing the locally embedded perspectives with more analytical scholarly perspectives is by no means intended to downplay the importance of indigenous voices, which are evidently central to the matter. It is rather a recognition of the fact that it is

indeed Sámi authors and editors who are themselves the best positioned to expound on their own histories and experienced realities, and that it befits outsiders to develop an understanding for how these realities exist not in isolation but within a global framework that reproduces colonial and ecocidal practices all over the world through the way our societies are organized.

Throughout the document, genres and formats criss-cross. Generally, the approach has been a relatively hands-off editing of fairly extensive interviews and accounts as opposed to a Twitter-like news-feed. Inevitably, this approach will be straining and tedious for some readers, authentic and insightful for others. Although it is recommended to read the whole to get a fuller picture, it is possible to read the texts separately as well, with a glossary at the end helping the reader out to find their way through sometimes specific terminology.

Note on spelling: the North Sámi spelling 'Sápmi' is favoured throughout the document as opposed to Lule Sámi 'Sábme' for being the more common pan-Sámi and international denomination. We have attempted to respect the local (Lule Sámi) spelling of other more specific place names. That means that places known among Swedish and perhaps international readers might not be recognizable at first. For example Luleå becomes Julevu, Kiruna Giron, Gällivare Jiellevárre, Malmberget Mámmavárre and Jokkmokk Jáhkámáhkke.





# GÁLLOK

Gállok lies in the historical homeland of speakers of the Lule Sámi language, named after the Lule River basin that connects the mountains of the northwest to the coast in the east, by the modern town of Julevu (Luleå). In the last century, the Lule River course has been dammed at multiple locations. The site we refer to as Gállok lies on the banks of Gállokjávrre as well as those of the larger Bårgávrrre (Parkijaur). Its static energy powers the Parki hydroelectric power plant. The construction of the dam caused the inundation of a Sámi offering site below the sacred hillock Átjek. Átjek, its name bearing reference to ‘Thunder’ as well as ‘Father’, is said to frequently attract lightning discharges. In its core, as well as in the surrounding area, large quantities of iron ore have been detected. Thus Gállok, or in its Swedified form ‘Kallak’, has drawn the interest of mining prospectors. In 2006, a British enterprise by the name of Beowulf Mining was granted a prospection license in the area. In March 2022, the Swedish government announced that they receive permission to exploit the Gállok site.

When Beowulf Mining was granted prospection rights in the Jokkmokk-Kvikkjokk area, Gállok being part of that area, their intention was to prospect for iron and titanium in the Ruovddevárre Mountains by Kvikkjokk. These mountains, however, are part of the Unesco World Heritage Site of Lapponia. This is an area considered to be worthy of protection due to its “outstanding universal value” based on the pillars of both natural and cultural history: the alpine landscape, its geology, flora and fauna, and the cultural way of life of Sámi reindeer herding

as practiced in the area. As the idea of blasting a mountain to bits within a Unesco Heritage site was too sensitive a matter politically, the focus shifted towards the iron ore deposits of Gállok. Gállok does not lie within the boundary of the Lapponian Area heritage site, yet its location is of central importance to the migratory behaviour of the reindeer that in summer browse the fells of Lapponia. In particular the reindeer herding community of Jåhkågasska tjiellde would find a bottleneck area for their annual migration blocked by a mine in Gállok.

The Gállok case first received wide public attention in the aftermath of a major marketing blunder by then-chairman of Beowulf Mining Clive Sinclair-Poulton in 2012. In unabashed Victorian fashion he addressed a shareholder meeting in Stockholm, showing a picture of a seemingly empty landscape: “One of the major questions I get is: what are the local people gonna go ahead and say about this project? I show them this picture and I say: what local people?”

The reason this was a marketing blunder was not so much because of what he said, but rather because he actually said it, openly. Of course sparsely populated ‘former’ colonies are still treated as *terra nullius*, up for grabs for ‘foreign investment’, ‘development’ and neocolonial variations of the *mission civilatrice*. The problem with Sinclair-Poulton’s old-fashioned statement was the honesty and nonchalance of it, failing to respect the obfuscatory codes of political correctness.



Sarek National Park





Above: View of Sarek from a tree in Gállok. Below: Gállokjávrr.



The threat to the future of reindeer herding in the area, the infringement on anyway poorly recognized indigenous rights, the neoliberal plunder of resources by foreign investors, the certainty of pollution of aquatic ecosystems and drinking water, the risk of a major environmental disaster in case of tailing dam failure, the air pollution involved in open-cast mining and the emission of greenhouse gases connected to the mine and its logistics, are among the main concerns raised in opposition to yet another iron mine on Sámi territory.

When prospective drilling started in Gállok in 2012-2013, a call-out was heeded by activists from the south to come and support the local people, who by then had formed the *Inga gruvor i Jokkmokk* (No mines in Jokkmokk) network.<sup>1</sup> They blocked machinery and eventually the whole access road, which they held for several weeks until being forcefully removed by Swedish police forces. This summer has later been referred to as “The Gállok Rebellion”<sup>2</sup>.

It is important to emphasize at this stage that it was not activists from southern Sweden who instigated opposition to the mine. They joined an already existing opposition by the local population. It should be borne in mind that the consequences of openly resisting a controversial mega-project can be much graver and longer lasting for locals who are known in the area than for relatively anonymous activists engaging with the conflict for a short time. This is especially true for an already marginalized group that has had to deal with racist oppression from a settler-colonial State for hundreds of years.



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<sup>1</sup> Note that the network uses the swedified spelling Jokkmokk. Henceforth the Lule Sámi spelling Jåhkâmåhkke will be favoured in this document. If used in a quote the Sámi way of spelling will be added afterward. Another Lule Sámi name for that place is Dálvvadis

<sup>2</sup> For a more detailed overview over what happened in Gállok the summer of 2013 we recommend you to watch the documentary “The Gállok Rebellion” made by some of the activists on site.



# THE GÁLLOK REBELLION

”Fucking hell. Here we go!”

A middle-aged Sámi man was standing in the ditch next to the dirt road and looked with a somewhat wondering smile at me. He uttered a liberating gasp.

‘Now we’re talking! But what if... what are people gonna say?’

I looked up smiling without stopping to throw up rocks on the road.

‘We can’t just sit around here talking all the time...’, I replied.

In the background, the sun was moving somewhere behind the tree line, and here and there the fog had settled in the sinks of the forest. The mosquitoes were buzzing intensely all around me. Most people were asleep, but some remained around the fire. The guitar was being tuned. It didn’t really matter when you were sleeping. It was never really dark anyway.

A friend and I had hitchhiked up a week earlier as soon as we had heard. An exclamation for help from some locals had been thrown around the internet. A machine had already been blocked by some friends

who came a few days earlier. The company was about to investigate the bedrock, to blast and drill holes deep into the ground. But the spirits were high anyway, and the ember from the struggle in the Ojnare Forest the year before was still shining in our eyes.

Stone after stone, nail after nail, everything fell into place, and suddenly we stood there on the barricades as the cops approached the tower. We were not so many, but we were determined. We would not give up.

Now I can't believe that it's been 10 years since we sat there in the goahti and ate reindeer meat and potatoes, carved bows and discussed dam failure and colonialism. How Eva-Lotta Helsdotter's hair fluttered in the wind when she stood in the middle of the Parki hydrogen power plant and talked about how a mine would poison the ground water. When Tor Tuorda caught our hearts with his charisma and his stories about the history of the place, or May-Britt Öhman's insights on the brutal structure of colonialism. Things we had never been told during our twelve years in school. Did I even know what a Sámi was before I got there?







But even after all this time we are here to say that the Gállok Rebellion is still alive! We will not give up! The resistance is still growing! We are still determined that there will be no mine in Gállok. We keep organizing gatherings and skill shares. We are still blocking infrastructure, still annoying the people in power and still disrupting the exploitation as much as we can<sup>1</sup>. We are not many, but that doesn't stop us. Our movement will grow. We don't really have a choice. So we continue. Of course, we all know that this is not just about Gállok. This is a struggle against the whole colonial death machine that is eating its way through our landscapes, bodies and minds. This is a struggle to defend what is sacred, our shared living and breathing earth.

What was to follow was an intense journey through laughter, play, rage, worries, sorrow and love. One blockade after another was built while the colonizing cops stayed busy trying to remove us. This really was a radicalizing process and more and more people eventually found the courage to engage in direct action (for example an 85 year old reindeer herder doing a sitting blockade).

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<sup>1</sup> See "Resistance" zine on [kolonierna.se/zines](http://kolonierna.se/zines) for more information about the past 10 years of environmental struggles in the Swedish colonies

In some sense my friends and I felt like strangers to the area and the people at that time, but at the same time we felt so warm-heartedly welcomed and almost a bit celebrated by many of the locals. People from all over the world came to join in and support the struggle throughout the summer. We all had our own ways and reasons to try to stop this insanity. We didn't fight *for* the Sámi or the other local people. We fought side by side *with* them to defend something we all held sacred. A mixture of yoiks, ceremonies, art installations, poetry slams, workshops, plant walks, meetings, play, conflicts, stories around the fire... For many of us Gállok became our home, and so many local people opened up their homes and hearts to us. Together we struggled, side by side, trying to find ways to stop the continued destruction of the land we loved.

“MOTSTÅNDET VÄXER”

THE RESISTANCE IS GROWING

Greetings,  
from one of the editors  
and one of the many Gállok defenders  
throughout the years



...for every dam constructed  
every tree you want to take down  
every place you wish to blast  
a thousand voices will burst forth  
from us  
who is  
what local people

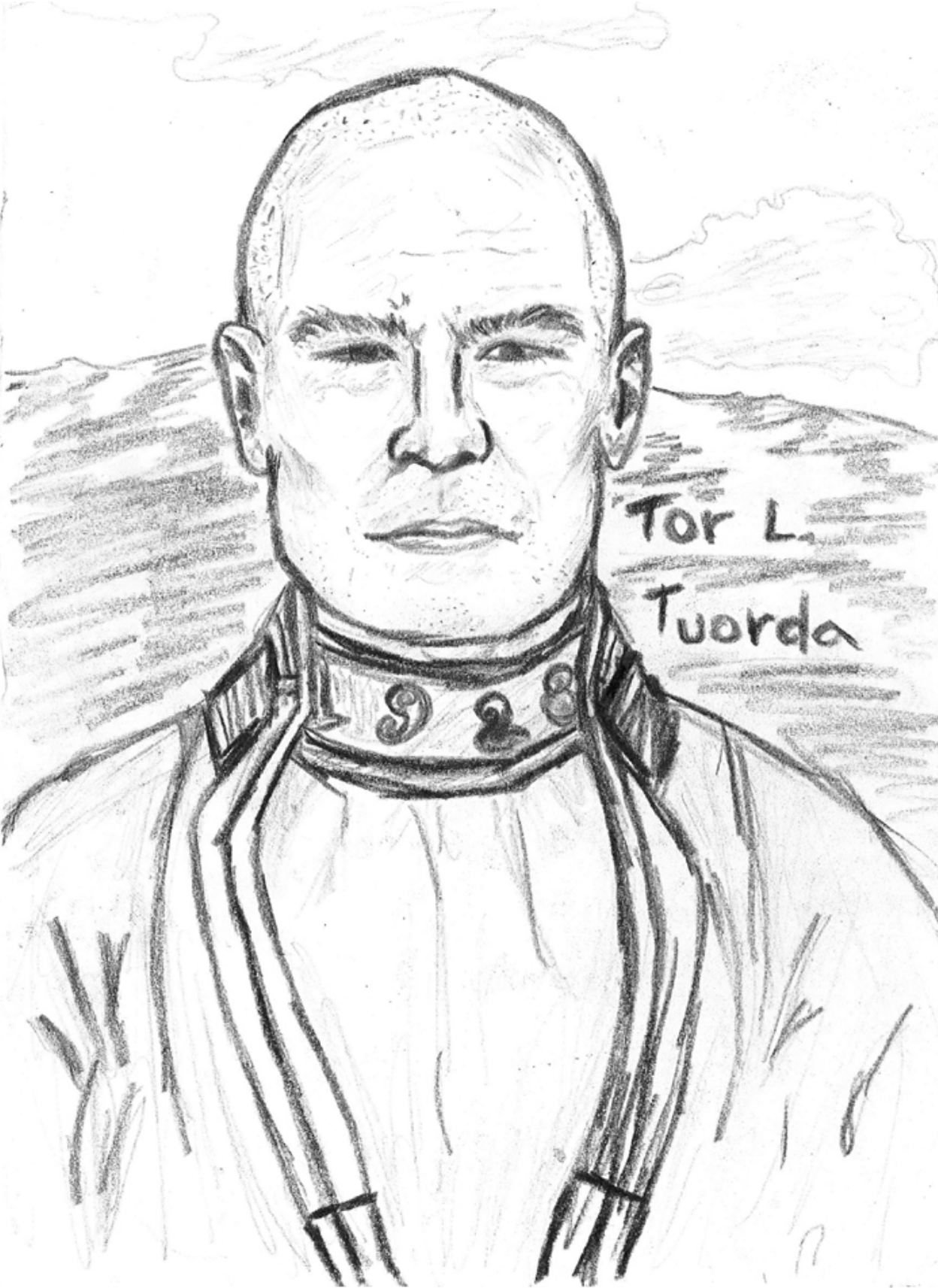
We who love and wish  
that our greenery is preserved where it is  
without you cutting it down  
draining it

for the fact is that you choke a minority  
know that we stand with one foot in the grave  
but the roots go too deep to tear up  
it will never work on us  
we are not possible to bribe  
so stop  
you can't crack us  
you will never break  
us local people.

~Timimie Märak







Tor L.  
Tuorda

# “This is an old cultural landscape”

## A local activist guides us through the area

Tor Tuorda, a man of Sámi lineage in the area of Kvikkjokk, lives in the village of Ráddnávrre (Randijaur) next to Gállok. Ever since 2006 he has been drawing attention to the threat represented to the area by the plans of the Swedish State and Beowulf Mining. On the banks of Bárgávrre he shared with us his knowledge of the history of the place. He took us on a stroll over the soft and soggy blanket of billberries, bog blueberries, cloudberry and bog rosemary, indicated bear marks and three-toed woodpecker bore holes in tree trunks, explained how knurrs on old trees used to be shaped into ceremonial drums (called *goavvdis*) and showed us the remains of an old Sámi dwelling (called *goahti*). Under unrelenting assault of mosquitoes, midges and horse flies, Tor helped us to discern in the remains of the old *goahti* the fire-place that would have provided just the right amount of smoke to ward off such assailants. The marks of historical habitation are visible only to the trained and attentive eye, and as such easily overlooked by the biased civilized gaze that seeks to deny claims of long term Sámi presence in the area. Yet, backed up by archaeological and archival work, Tor knows that where some see only trees and shrubs, the land always bears witness to its own past.

“This is an old cultural landscape, a Sámi cultural landscape. Sámi have traveled and hunted here. They had a lot of traps in this forest, they were fishing, they had their reindeer, they milked the reindeer. They lived on many feet, just to survive. The men were mostly hunting and fishing, the women with the reindeer. In 1720, according to the church books, one of the reindeer herders of this landscape was a woman: Gunilla Pålsson, a powerful woman. She was caring for the males’ reindeer, also for the reindeer of the settled Sámi of the village of Ráddnávrre. At that time reindeer were kept very intensively. She would have made a smokey fire to keep away the mosquitoes while milking. The reindeer were kept very close to the people, moving short distances between grazing grounds.

Taxes had to be paid in furs – marten, ermine, wolverine, squirrel, ... and dried fish and meat. It was also a force upon the Sámi to pay taxes in furs. You can’t eat a marten. It wasn’t in the Sámi culture to use marten fur either; it was reindeer fur they used, and some wolverine.

When the Swedish government saw the value of forestry and mining, they stole this tax land from the Sámi. Samuel Gustav Hermelin, a member of the Swedish upper class, a count, was the one who took this land. By 1905 all the tax land had been stolen and the taxation system was dropped.

**The Swedes did precisely the same as did the government of the USA, with that difference that they didn’t kill millions of people. They reached the same goal with laws and paragraphs. They only used paper and pen and managed to do exactly the same: a big huge land grab.”**

### Along with the first mine came the first church

An important driving force behind the colonization of Sápmi was the advent of mining in the area. As the enforcement of systematic taxation had marked a decisive shift in the relationship between the southern Swedes and northern Sámi, so the exploitation of the mineral resources introduced another layer of colonial violence. Along with the colonization of the land would come the colonization of the body; the body to be followed by the spirit. In the seventeenth century, silver was the currency of the expanding capitalist world economy and the stock backing up State expenditures such as military campaigns and overseas colonial ventures. Silver was found in the mountains of Árjepluovve, as Tor relates.

**“The first mine in Sápmi was opened in 1635, at Nasa. They forced Sámi, tortured Sámi, killed Sámi. They forced the Sámi and reindeer to transport the ore over about 70 kilometers. They stopped when it was almost empty. Then they moved west from Kvikkjokk. The old Sámi name for Kvikkjokk is Huhtán, which means ‘melting place’, where they processed the ore. That continued about forty years. Silver ore was transported from about 65 kilometers away, from mines which are nowadays in the Padjelanta [Badjelánnda]**

and Sarek national parks. The government got from these mines about 31kg each year.

They forced Sámi there too, punished Sámi, dragged Sámi under the ice, whipped them. A lot of Sámi ran away from this area. Around 1670 there was no one left of the Lule Sámi that used to live here. Everyone had fled to Norway because of this forced labor. That period, these forty years of madness, the smoke of the foundries, the crushing of the ore, the yelling, were like Dante's Inferno. Sámi that lived here hadn't seen anything like that.

But then, in 1702, they stopped the silver melting. And it was calm. The only Swedish persons who lived in Kvikkjokk at that time were a priest and his family. The wife was an entrepreneur. She had a lot of tame castrated reindeer, *hårkar*, and undertook many merchant journeys to the coast with a sled – dry meat, horns, furs, ptarmigan,... and came back with other items such as flour and salt. She was also befriended with the *noaidi*, the Sámi shaman. She was a priest's wife but was interested in the Sámi religion.”

She was not the only one to take interest in the Sámi's approach to matters of the spirit.<sup>1</sup> As taxation was employed to lay claim upon the Sámi's time, corporal punishment to lay claim upon their bodies, State sanctioned property rights to lay claim upon their lands, so were the eradication of indigenous religion and forced Christianization employed to lay claim upon their spirits. Mandatory church attendance went hand in hand with prohibitions on divination practices, desecration of sacred sites (*seidi*), confiscation of ritual drums (*goavddis*) and persecution of *noaidi*. Subsequently, children would be severed from their parents and grandparents and sent to boarding schools for civilized, European, Christian enculturation. In early modern times, the whole instrumentarium that the coalition of Church and State had developed domestically was brought in full-fledged operation in the colonies. The transgenerational trauma inflicted by the eradication of meaning, the humiliation of enforced adoption of an alien and domineering godhead and the scarring of the ancestral and spiritual bond with the world one inhabits, one can only try to imagine as an outsider.<sup>2</sup> We do not consider it our domain to here delve deeper into a sensitive matter that, we are told, remains taboo within Sámi communities.

Yet what is clear is that many grim stories around Sweden's colonization of Sápmi – whether they pertain to the theft of children or the witch trials against *noaidi* – remain either untold entirely, or ignored in Swedish historical consciousness. Would they represent too great a blemish on the conscience of a nation so sensitive to its self-identification construed around notions of social equality, moral impeccability and global responsibility? Would these stories be especially awkward in the context of a new wave of neocolonial exploitation and negligence of the Sámi's indigenous rights? One such untold story lies buried somewhere in the town of Jåhkâmâhkke, Tor explains.

“Back in 1935 a priest visited the site for the new Jokkmokk [Jåhkâmâhkke] hospital. Where they were digging, a hole was found with up to sixty Sámi skulls and remains of about forty more people. They put the bones in a box and buried it in another place. They didn't mark it. And almost no one has written about it. They don't research this, don't do anything. They were executed, decapitated, I think. But I don't know why. No one knows. And no one bothers. Also the Sámi that refused to hand over their drums, were killed. For Christianity's God.”



1 It may be noted that in trying to refer to 'matters of the spirit', 'religion' or any other such choice of words in the same semantic field, one finds oneself at risk of reproducing a modern European conceptual demarcation that is most probably alien to the culture one is trying to talk about, namely one in which this discrete field has not been enclosed but is rather allowed to permeate the totality of experience – a culture that, to use another modern European term, would be called animistic.

2 Though in a way one could consider these colonial processes to be especially dramatic, contracted episodes in a more generic historical development of the civilization in which presumably most of the readers were born. In the case of Sweden this history also included enclosures of the commons and massive witch hunts that targeted not only Sámi *noaidi* but also Swedish women.



## Deforestation

Not only has the Swedish State-owned company Vattenfall dammed all of the waterfalls and rapids along the Greater and Minor Lule Rivers, damaging the aquatic ecosystems as well as the adjacent land, also the land that has not been inundated has not been left undisturbed. For the land surface too, the boreal forest once covering the lower regions of Sápmi, has been affected by the logic of development and financial value extraction. As a result, barely any natural old growth forest remains: only a few percent of the precolonial old growth forest cover is left, almost uniquely on the less productive higher altitudes. The landscape around Gállok too displays the marks of clear-cutting, a forestry practice that is still commonplace on Swedish territory. Some of the forest around Gállok has been freshly cut and now lays bare, with the exception of a few seeding trees that have been left to reseed the scarred and compacted soil. Other sections have been clear-cut in the previous century and are now pine mono-cultures. Yet also a rare patch of old growth forest remains, home to red-listed species such as the three-toed woodpecker. More than half of the red-listed species on Swedish territory are forest species. Annually 200 000 ha of forest are clear-cut on that same territory, most importantly by multinational corporation SCA and State-owned company Sveaskog, FSC-labelling notwithstanding.

Current Swedish forestry practices in Sápmi are rooted in the historical seizure of the land by the Swedish State and the development of settler colonialism in the region. The establishment of a stable settler colony requires the settlement of subjects of the metropolitan, colonizing force. This typically involves a blend of high ranking colonial administrators, missionaries and commoners whose native societies have often gone through processes of dispossession and enclosure themselves. To incentivize settlement in Sápmi, Swedish and Finnish (who were then subjects of the Swedish Crown) peasants were offered privileges like temporary exemption from military duty and taxation. Additionally, significant parts of the already present population were assimilated into the crude category of *nybyggare* or settlers, including Forest Sámi who adopted farming practices and sedentary lifestyles. The extent to which the different forms of land use resulting from the parceling out of the stolen land were ultimately bound for conflict is debatable, but the presence of settlers did not exclude the possibility of coexistence, mingling and mutual aid in relation to the Sámi population generally, or the reindeer herding part of Sámi society specifically. For a long time, the exploitation of the forests was carried out on a comparatively modest scale. However, with the advent of mechanization, in particular the introduction of large forestry machinery in the second half of the twentieth century, the scale tipped from land use to ecocidal plunder.

In tandem with mechanical engineering, social engineering methods were used to maximize wealth extraction from the land that had historically been usurped from the indigenous population. To spur the ‘development’ of the region, tax pressure was imposed on the settled population that would have used the forest as a commons for subsistence purposes including controlled burning, cereal cultivation and cattle grazing (sylvopastoralism). To meet the tax pressure, the commons, *allmänningar* in Swedish, were transformed into commercial associations by the same name. Born under tax pressure, these *allmänningar* came to master the logic of profit-oriented exploitation and over the course of the last sixty or so years, they grew out to become among the most aggressive clear-cutting enterprises on Swedish territory. Within settler culture, current forestry methods of erasing whole tracts of forest came to be regarded as ‘traditional land use’. The largest of these associations is the Jokkmokk Allmänning, proprietor of the land around Gállok and keen supporter of mining concessions on ‘their’ land, which is also the land the reindeer herding Sámi depend upon. Tor continues his discourse.

“So it began, and so it continues: every inch of land you passed when you came here, be it from Jokkmokk [Jåhkâmáhkke], from Luleå [Julevu] or from Stockholm, it doesn’t matter which way you took, from the coast or the inland, everything is a plantation, everything. Also here. They clear-cut everything, completely destroyed the old forest and grow only one species. In the south it is spruce, here it is pine. Pine, pine, pine. And the Swedes that come to this area now say: ‘Oh what a beautiful forest’. They don’t know. They don’t see the difference between a real forest and a plantation. The biggest species we have are fungi. You don’t see it, it’s under us, you only see the fruit. When you clear-cut, everything gets killed. When it gets killed it rots and leaches methane gas. It is dreadful. It is the Western economics that boosts this so-called ‘development’.

**Átjek was a holy mountain. My relatives were offering to the gods here. But then the offer place was**

JUHÁN  
NÍLA  
STÁLKA



THEY HAVE 2 KILL US

# Yoiking the glacier to keep it alive

## Listening to a Sámi youth in a melting world

Juhán Niila Stålka grew up in southern Sweden but moved back up to his Sámi homeland as an adult. During long car drives he learned yoiking from his father, who had learned it from his great grandfather. Yoiking is the Sámi people's way of chanting. Over a decade Juhán has been involved in Sáminuorra, a Sámi youth organization, working on various projects ranging from lasso throwing competitions over sobriety and queer campaigns to organizing events focusing on other indigenous peoples, civil disobedience, and putting pressure on Sámi and Swedish politics. The thing he loves the most about Jáhkámáhkke is the drinking water. Each time he's been away, he gulps a whole jar of water when he gets back home.

“It's the best water I've ever had. But as you know with this planned mine, they are planning a water dam to make sure that mining sludge doesn't go down to the Lule River. The thing about dams is that one of two things will happen. It will break or it will leak. If it leaks or if it breaks, that mining sludge will run down into the Lule River. The life of a mining company today is fifteen to twenty-five years. So of course this mining company would pay for this dam for these years, but after that they will just bankrupt the company and leave us with a big dam and a problem. In the meantime this international company has come to take all of the resources and all the money for their own pockets.

**If this mine gets built, for Jáhkágasska Sámi village to continue traditional reindeer herding will be impossible.** They would have to load the reindeer on a truck to drive it past the mine. They won't be able to move along traditional patterns because this is the smallest part of this reindeer herding area. For me, that's enough of an argument. I wouldn't need more than that. But as you know, the Swedish government changed the mining law in the nineties. For these minerals the State can tax 0.02% so for every million the company makes the State gets a few thousand Swedish crowns. And still the municipality is paying for the roads; the region is paying for the railways. This is at the same time as they want to close down the healthcare facilities. Even from an economic standpoint, without considering human rights, this is a bad idea.

I was working at Amnesty International for two years. I was out on the streets and recruiting people, talking about human rights. And then I started to formulate this idea in my head where I tried to describe the things happening in Sápmi all the time with the exploitations. The thing you're doing is you're putting human rights up against economic interest. You're weighing them on a scale to see which one



is worth more. But the thing with human rights is that as soon as you put them on a scale and try to compare them to economic interest, you forgot what human rights are about. So even before we've started comparing, we've already lost.

If there's one thing I want to take out with you it's this scale with human rights and economic interests – that if you're comparing these two, you've already forgotten what human rights are about. The other thing is the cumulative effects. The problem isn't one exploitation. It's hydroelectric power plants, it's wind power plants, it's mining companies, it's buildings for people to live in, it's roads, railways, and today we have less than two percent of old forest in Sweden.

The Lule River provides nine percent of Sweden's electricity, my ancestors' living places are now underwater due to the dams, and that is not to mention the effects on biodiversity. Not too far east from here, in Letsi, they have the longest dry river in Europe. That means no fish are able to climb up there, no vegetation. The laws that these decisions are made on, are a hundred years old. A hundred years ago we had very different values on climate issues and much less knowledge than we gained in these hundred years. We, of course, knew all the time. We call it *árbediehttu*, traditional knowledge. We understand that you can't do these things without getting consequences.

**People talk a lot to me about wilderness. I don't know what this place is. I have never seen it.** It's never been my father that talked about wilderness, never my grandfather or grandmother, it's always been politicians, reporters wanting to do stories on visiting the wilderness, seeing the northern lights and experiencing minus forty degrees in winter. Those are the ones talking about wilderness, but we understand there's nothing wild about this place. Every place here has a name and we know this area. All the areas we use. There is no wilderness.

My grandmother was born in Ruokto towards the Big Lule River and she lived there during winter. During summer she went up to Stuor Muorkke, to Stora Sjöfallet up the big river with boats, with goats, with kids, with everything. They pulled their boats over into the next lake and went west during summer. Now people are coming down from calf marking, close to the Norwegian border, on the other side of Sarek and Padjelanta [Badjelánnda]. The area is being used.

In the beginning of the nineteen hundreds the government decided that the sites of Sarek, Padjelanta [Badjelánnda] and Stora Sjöfallet should become national parks and should be preserved for the future and we shouldn't touch them. Then they decided: well, a bit of hydroelectric power plants would be nice. So they took a ruler. If you look at a map today you can see how they took out puzzle pieces where they have these hydroelectric dams."

When Juhán, though only a young man of twenty-three, entered the *lávvu* (a teepee-like tent) where we were seated, his charismatic presence filled the space. He introduced himself, sat down and started talking. He told us all this and he yoiked to us. "Yoiking used to be taboo," he said. "You wouldn't do it around people." He yoiked to us a mountain hare and a reindeer calf, an elk, a great lake and the Gállok protest, and told us about the yoik.

"Yoiking has always been a way of telling stories. One of these stories I heard as a kid was about the mountain Jiegnáffo west from Kvikkjokk. The story I heard was how the glacier went from being white to totally black from all the reindeer seeking cold there during the summer to get away from the mosquitoes and cool down a bit. But today this glacier isn't getting black from the reindeer but due to climate change as this glacier is slowly melting away. That has become part of my story telling about this area. **The important thing with yoiking is that we believe that nothing is truly dead until you stop yoiking it.** So I will continue to yoik this glacier and hopefully it will keep it alive.

In reindeer herding, yoiking is used to keep the reindeer calm. Maybe you hear a crow flying by, and then you yoik the crow. Maybe far in the distance you hear the Grey One, maybe you yoik the Grey One to scare it away, make sure it doesn't come closer. It's a way to make sounds to keep predators away and keep the reindeer together. If you're moving with reindeer, there's yoiks to make them pick up the pace: we're getting close to the place where we're finishing today. So there's yoiks to make them move the last few miles.

Maybe if you went to a festival and met a nice person, maybe you learned his or her yoik and when you got home, instead of describing this person with their traits you could yoik them, as it would paint a better picture of this person. With persons' yoiks you can tell a lot. Usually they start with maybe three tones when the person is a kid and then they grow more complex as the person becomes more complex. You're supposed to describe nature just the way you've heard it. The same with people. There's even stories that you could hear that a person was to die young. That's how complex yoik can be.

There is a big prejudice about yoiking being connected to religion. The *noaidi*'s trance yoik is only about 5% of yoiking. This prejudice is the basis for the Church being so harsh on the yoik when they christianized the Sámi people. They took religious symbols such as the drum and burnt them. They took even shamans, *noaidi*, and burnt them during witch trials. Today there's only 70 of these drums left in the entire world. 8 of them are in the museum in Jokkmokk [Jáhkâmáhkke], a few more are in Stockholm and there's some in the UK and a few other places in the world. It's starting to feel like it's time to give these items back to where they belong."

# “Indigenous people are not involved with our work in regional development”

Visit to a former county administrator



When one follows the waters of Bárgávrrre to the west, in the direction of Kvikkjokk and the Sarek mountains, one finds on its banks the village of Björkholmen. Like Ráddnávrre, this village would be severely affected by the planned exploitation: at least it would have a huge waste dump directly next to it and get covered in dust and toxins from the open-cast mine.

One of Björkholmen’s inhabitants is Johanna Lindberg. Originally from southern Sweden, Johanna has an academic background in geology and has been working over a period of twenty years in several governmental administrations in Stockholm, Jämtland and Norrbotten and currently works on a PhD at Luleå Technical University – Sweden’s main mining university. Her work has focused on issues of sustainable development.

The first time Johanna and her neighbours were informed of the planned mine was when they received a letter from Beowulf Mining announcing that the company would provide laundry facilities in the village to aid in washing off the dust. We talked to her about Gállok and the logic - and illogic - of the development policy in Norrland.<sup>1</sup> The baseline: “If you want to continue the same kind of structures of life that we have right now, with the same kind of ideas - that means: capitalism - we need mines.”

<sup>1</sup> *Norrland is a term referring to the northern area of the territory controlled by the Swedish State originating in the nation State formation process that consolidated first Svealand and Götaland in the south and later added Norrland (north) and Österland (east, now Finnish territory). Norrland covers about sixty percent of Sweden’s territory and actually coincides roughly with the part of Sápmi under Swedish rule. In this publication we generally favour the Sámi term ‘Sápmi’, though without omitting the use of ‘Norrland’ when it is referred to as such from a southern Swedish perspective.*

“When you look into policy, it’s described in a way that suits urban areas and then applied to everyone. The policy for northern Sweden has been the same for at least a hundred years. Ever since I’ve moved here, they’ve said: the future of Norrbotten is forestry, water power and mines. Now, with this ‘innovation’ in Green power and Green steel, I was thinking: you’re doing the same thing as always, you’re just developing your techniques. **The natural resources from Norrbotten are needed in the city to keep Sweden moving. There’s a view of Norrbotten and northern Sweden in southern Sweden that the natural resources don’t belong to us, they belong to southern Sweden.**

The county council was responsible for the first investigation on Gállok. Regional development with growth issues was then the highest status area within the county council’s administration. It was decided upon that the Gállok mine was ‘good for the society’. They also had help from the mining university, Luleå Technical University, who also said that this was ‘good for the society’.

Then when me and my colleagues moved to the county council, they had other issues that the government told them to put the focus on instead, such as environment, cultural issues, gender issues and so on. Then all of a sudden, the next time there was an investigation, they had another opinion: this is ‘not good for the society’. So it all depends on the kind of perspective you are allowed to have the focus on.”

Clearly, whatever is ‘good for the society’ is about as vague an assessment as can possibly be. Apart from questioning how one estimates ‘goodness’ within a value system centered around abstract monetary value, the other obvious question is: which society? When asked about the consideration of Sámi interests such as reindeer herding in the county council and county administrations’ programs for sustainable development we got the following answer.

“We don’t know that. Nobody has ever investigated that. That’s never been taken into account as a growth area. I don’t know why. Indigenous people are not involved with our work in regional development. I’ve been working with regional development since 2002 and I’ve never had a counterpart within the Sámi society to work with, and that’s a frustration for me and for them.”

So sustainable development is really about growth, since growth is ‘good for society’. The mining advocates insist that Jåhkâmåhkke, with its ageing population and slacking economy, is in dire need

of the economic boost that the Gállok mine would provide. Yet Johanna and her partner, who has been working in lobbying and is not generally opposed to new mines, point out that in fact Jåhkâmåhkke is Sweden’s greatest per capita contributor to GDP growth after Stockholm and unemployment rates are among the lowest in the whole country. Given Sweden’s neoliberal mining policy and the possibility for investment companies to shuffle profits around and evade even the minute taxation imposed on them, the taxable result would be negligible. The tax revenue on labour depends on where the employees are registered and Jåhkâmåhkke with its low unemployment rates cannot provide the labour force that would be required, so labour would have to be imported. At the same time all the surrounding infrastructure would have to be paid for by public investments. Which ageing population exactly would be provided for? Ageing finance capitalists in London and Stockholm? Sinclair-Poulton and his cronies? The ageing population of the Virgin Islands?

Another argument for mining the veins of Sápmi is that the whole world is in dire need of a Green Transition, one that entails the construction of renewable energy infrastructure such as wind parks (with a lifespan of perhaps a decade or three), battery factories for electric cars (perhaps with inbuilt obsolescence) and Sweden’s youngest parade horse: Green steel. As Beowulf Mining has it on their website: “The Company’s purpose is to be a responsible and innovative company that creates value for our shareholders, wider society, and the environment, through sustainably producing critical raw materials, which includes iron ore, graphite, and base metals, needed for the transition to a Green Economy and to address the Climate Emergency.”<sup>2</sup> We live in an era in which it is perfectly normal to seriously suggest that open-cast mines ought to be opened to address the climate emergency. To readers who were born in this somewhat peculiar millennium: such claims did not use to be commonplace a short time ago. Johanna shares her inside perspective from the sustainable development branch.

“In the beginning of the 2000’s we didn’t have wind power plants because we didn’t have money for it. Now it is said: we need this Green steel. Yes, we need steel, but we’ve never put an incentive or money towards reusing steel. I remember visiting a friend in Russia. We were traveling by train from Moscow to Nizhny Novgorod and we saw so many trains just standing there rusting. You see it all over the world. Boats are driven to what is called boat graveyards in India. There is just so much steel that is just there!

<sup>2</sup> <https://beowulfmining.com/about-us/purpose/>

I don't understand: why can't we just use it? We've got a huge problem with deposits in Sweden because they are leaking. When they were built they had the brilliant idea to put them on water divides so that it spreads as much as possible and you get the shit away. This is true. The problem is that they didn't understand that it is poison that one spreads. So why not spend lots of money on a win-win situation? Why not just mine the deposits to get all this poison away from them? It's not politically right I think: reuse is not high status, it's not done, it's *flummig*<sup>3</sup>. Lots of people around me say that sustainable development is *flummig*. How on earth can you say that? Is unsustainable development better? That is what we do now. Is that better?"

*Do you think that economic growth is sustainable?*

"No, I don't. But I think it's really hard to change it. When I say this, I always get to hear from colleagues: Oh, so you want to live in caves? No, but I don't need new clothes every year or every second year."

**"Around 2010, water power was regarded as almost the worst kind of power, almost worse than nuclear power, and then all of a sudden they changed the rhetorics and everyone is so happy that we have water power because it's 'just so clean'. No, it's still as unclean as it's ever been!"**

Above the dam, the water quality is good (according to the EU framework), downwards, the more dams we have, it gets worse and worse. The fish can't go up anymore. No fish from the Baltic Sea comes up here anymore. It's easy to understand that without that natural habitat of fish it affects the ecosystem. Instead of having lots of good water flowing into the Baltic Sea, we have lots of 'less good water' flowing into there, which of course affects the whole ecosystem of the Baltic Sea. But electrified cars - they're good, they have no emissions at all! In May-June, when the ice is breaking, it's only mud one sees, no water. This is the case for all of the rivers that are exploited in Norrland, which is all of them, apart from Kalixälven and Torneälven.

Within sustainable development something changed in terms of thinking about the bigger picture of the environment to just climate change. I talked to Jetta Oström who wrote the Swedish equality goals in 2006. She said: something happened around 2010. Other people also said: something happened around 2010. I don't know what. Something happened that made equality less important and the only environmental issue talked about was climate change.

*3 A term hard to translate meaning something like vague, hazy, frivolous or silly.*

**Before that it was mainstream to say: if you want to fix the world, you should use less resources. We had strategies for how to do that. After that: we should use more natural resources to fix the planet. For me that's... impossible.** To use more energy, to use more natural resources, make new cars even though they're electrical. What happened around 2010? I don't know, but something happened.

In general, we have a problem with smart goals, and this goes for all policies in Sweden. Looking at the agenda for 2030, you have a goal and an indicator. It's not really a goal because you only do what you can follow up. Take climate change. We have a goal that says that we should have no emissions. It also says that biodiversity should not be compromised, and also other areas should not be compromised as we work on the emissions. But we only have one indicator, saying: no CO<sub>2</sub>. That is why water power is good, because we have no indicator on climate change that says that we should preserve biodiversity. So with these smart goals, we don't really have goals, we only have indicators that say what to do. This steers in the wrong way. One indicator cannot view the entire change that has to be done. That's why I think that smart goals are really not helping the development, they are actually destroying it because you tend to focus only on the indicators that are measurable."

*Where would energy supply come from if it had to be zero CO<sub>2</sub> emissions, no leaking heavy metals, no compromising biodiversity?*

"In my world you cannot achieve that, but definitely we have to have an understanding that we have to use less energy, not more. That is why we have to find a new economic system."







# SÁPMI UNDER SWEDISH COLONIALISM

## WHAT IS SÁPMI? WHO ARE SÁMI?

Since we are talking in this publication about Sápmi and Sámi, it seems relevant to define what is meant by these terms. It turns out, though, that this is not an easy matter. Very broadly, Sámi are people self-identifying with Sámi ethnicity, which, like all ethnicities, is a category constructed around notions of kinship, shared historical background, customs, language and ways of perceiving the world and one's place within it. Sápmi, then, is the historical and present homeland of Sámi people, which consists of the northern area of Fennoscandia, from what is nowadays known as the Norwegian coast over northern Swedish and Finnish territory to northern Karelia and the Kola peninsula on Russian territory. Historically, Sámi were referred to as Lapps, and Sápmi as Lappland. Lapp is considered a derogatory term which is why we use the endogenous (self-identifying) term Sámi. The section we are focusing on here is the one incorporated by the Swedish nation State. That is the short answer.

A longer answer could delve into the linguistic origins of the Finno-Ugric Sámi language, genetic lineages tracing the Pleistocene ancestry of Sápmi's current inhabitants or archaeological finds of ethnic markers aiding to demarcate the extent of historical Sámi habitation. All of that lies beyond the scope of this piece. What is clear, is that prior to the advance of the Norwegian, Swedish, Finnish and Russian nation States, people inhabited the region we call Sápmi that were ethnically and culturally distinct from the dominant populations of these encroaching nation States. According to common understandings of that term, those people can be referred to as indigenous people "on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the

establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions.”<sup>1</sup>

The fact that both “descent” and the “inhabited geographical region” are defining characteristics of indigeneity may lend the notion to be confused with supremacist blood-and-soil ideology, with which it shares these two characteristics. Yet there are at least three important differences. One is whether or not identification is based on fantasies of racial superiority. The second one is whether one belongs to a colonizing or a colonized group. And a third important difference between notions of indigeneity and blood-and-soil ideology, although the elements of blood and soil are indeed implicit or explicit in both of them, is precisely how absolute the importance attached to blood is. Sámi scholar Harald Gaski points out that, at least in the case of the Sámi, “it has never been of vital importance to be full-blooded. What has mattered more is a person’s attitude toward the Sami people, language, and culture [...] There are even old Sami myths that express the positive side of mixing blood with other peoples through what might be called “extra-ethnic” marriage.”<sup>2</sup>

It may be added here, lest there be confusion about the matter, that there has never been such a thing as a uniform Sámi culture – it is a vast region indeed, in which historically and presently different Sámi dialects have been spoken, for example – and that culture contact and multi-ethnicity are normal human conditions. It being any different – having an undifferentiated national body inhabiting a hermetically closed homeland – is an invention of nation State ideology. So too precolonial Sápmi was inhabited by different groups and its boundaries fluid and porous. The fact that in a certain region Sámi were living does not mean that no one else was living in their vicinity.

Part of what makes the definition of Sámi ethnicity complicated, or all that relevant at all, is that it is not “irrespective of their legal status” as the above definition of indigenous peoples indicates. Or the other way around: recognized membership of the indigenous Sámi ethnicity does have legal implications. As archaeologist Carl-Gösta Ojala writes:

“Who is Sámi? This is a question which might seem easy to answer, but in reality is a difficult one. Intuitively, one would perhaps object that this is a personal matter for the individual and not a concern for the state or for that matter for any archaeologist. Strict definitions of the content of individual ethnicities would seem to be as unnecessary as they are inappropriate. However, the Swedish state has indeed been much concerned with definitions of who is Sámi. Although state interventions in Sámi identity politics started already in the late 19th century with the Swedish legislation on reindeer herding rights, the need for a clear definition of Sámi ethnicity in Sweden arose most distinctly when the Sámi Parliament was founded in 1993. Who were to be allowed to vote in the elections for the Parliament?”<sup>3</sup>

The answer:

“2 § In this law, a person is regarded as Sámi if he or she considers himself or herself to be a Sámi, and

1. ensures that he or she uses, or has used, Sámi as a language at home, or
2. ensures that any of his or her parents or grandparents use or have used Sámi as a language at home, or
3. has a parent who is or has been admitted into the electoral register to the Sámi Parliament, unless the county administrative board has subsequently decided differently.”<sup>4</sup>

That is how the Swedish State defines legibility to vote in the Sámi Parliament through membership of the Sámi ethnicity. What do people living in Sápmi have to say about Sámi ethnicity? Here are the answers of Sándor Lindström, who lives in a village with Sámi inhabitants, people with mixed heritage as well as recent migrants and, like so many people in Sápmi, has mixed ancestry himself; Henrik Andersson, reindeer herder in a long unbroken lineage; and May-Britt Öhman, a historian who discovered her Sámi genealogy as an adult.

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1 As indigenous people are defined by the International Labour Organization.

2 Harald Gaski, ‘The Sami People: The “White Indians” of Scandinavia’, *American Indian Research Journal*, 1993, p. 117.

3 Carl-Gösta Ojala, ‘Sámi Prehistories: The Politics of Archaeology and Identity in Northernmost Europe’, 2009, p.74.

4 *Ibidem*, p. 75.

## Sándor Lindström

“I don’t consider myself a Sámi - I don’t consider myself Swedish either. I think it is important to understand that Sámi culture is a culture and not blood. It’s so easy to erase the culture if you don’t actively do something with that culture. If you don’t speak the language and that is the only heritage you have left apart from the roots, the blood, it goes extinct. I can give an example. My two cousins are siblings. Their father was from Malå Sámi village. He wore the *kolt* - traditional clothing - but was also very assimilated. One of the siblings is taking back her heritage. She calls herself Sámi, wears more and more traditional clothes, has given her child a Sámi first name. Her brother is not taking back the heritage and if he gets children they will grow up to be Swedish. So it is important to understand how easy it is to erase this history.”

## Henrik Andersson

“If you feel like Sámi and if Sámi has been spoken in your home in the last two generations, you are considered Sámi. But I think this is also a little problematic. Anyone can feel like a Sámi. Today I feel like an Indian, I can feel like whatever tomorrow. I cannot be Indian, whatever I do. These feelings I don’t believe in. I think it must be some of the blood, that is my private thinking. Maybe I am wrong in this thinking, I don’t know. If I say to this dog: ‘go to sleep’, then someone has spoken in the home Sámi language and anyone here can become Sámi. It loses its legitimacy. I think there should be some historical research about the family that you have - grandmother or great-grandmother or whatever.

But we also have one good case. One of the most famous Sámi is Jon Henrik Fjällgren who was adopted as a child. There you don’t have the blood but he grew up in a Sámi family and all Sámi accept him. So it can also be a language thing and not a blood thing. It can be that you don’t have the blood but still you grow up as a Sámi. It’s hard to have rules that fit everyone.

I have a brother in southern Sweden that works normal work seven to four, has children, plays football and computer games in the evening. How long can you wait? His children don’t get the heritage. When they get children in their time, they will be Swedes, not Sámi. It’s a really tough question: who is Sámi and who is not Sámi?”

## May-Britt Öhman

“It is a long story in my case because in my family we were forced into assimilation on my maternal side. My maternal grandmother was Tornedalien, speaking Meänkieli,<sup>5</sup> came to Jokkmokk [Jåhkâmâhkke] and met my maternal grandfather, who was a Lule Sámi. But already by then, in the nineteen-thirties, a strong assimilation policy towards the Forest Sámi had been ongoing for a few decades. Forest Sámi, who were not mountain reindeer herding families, were forced to stand out as Swedish, as they might lose land and rights if they were displaying their Sámi identity. So already by my grandfather’s time it was hard to stand out as Sámi, whereas for my grandmother’s Meänkieli identity, speaking the language was not as suppressed. She would be speaking her language with her sisters, when going to church meetings and so on. Whereas my grandfather... nobody told me that he was Sámi when I grew up or mentioned Sámi language. It was only when I was forty-two that my uncle told me about our Sámi heritage and I met with a Sámi woman who pulled me into the community and also made me my first Sámi dress. So it’s been a journey of reclaiming my Sámi identity to see what it is and learning my own history.

It is many Sámi who have had to do the same journey. I have been talking to others in the area and asking what is Sámi to them. There is only one way of getting your Sámi identity formally acknowledged: by being on the Sámi Parliament electoral roll. So I applied for that, was accepted and then asked my uncle whether he would do the same because I figured it could be of interest to him. But then he said: “But how do you feel as a Sámi?” I had no good answer. We are from the area, this is who we are. It is only that the Swedish State did all kinds of measures of wiping the Sámi identity away, like enforcing Swedish in schools, not allowing Sámi to learn their own language, making them afraid to pass it on to the next generation. Sámi identity, what it means is: having to reclaim your own history. One other Forest Sámi of the area said: ‘We’re human, that’s what it is, and we live here.’ The idea of Sámi-ness is something that has come with racial biology and State policies. It is because of this you have to ‘claim’ an identity. Otherwise we’re just humans living here.”

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<sup>5</sup> Finnish language as spoken along the Torne River, on Swedish territory.

# HISTORICAL LANDMARKS

Below follows an incomplete list of landmarks in the modern, hence colonial, history of Swedish Sápmi (with a few excursions across the Norwegian border). Such landmarks are useful to the extent that they provide some kind of structured overview to people unacquainted with the course of the specific history, not in that they somehow sum up all that is important within the historical developments underlying these more superficial landmarks. This overview inevitably leaves out countless of untold stories lost to posterity, and many others unknown to the editors. Moreover, it is representative of a modern European conception of history as linear and chronological. It is the conception of history that the editors and probably most of the readers are accustomed to. Let us open the list, however, with a ‘landmark’ predating both the modern history of Sápmi and the modern conception of the history of Sápmi.

*“When the Great Creator created the ancestors of the Sami people, he laid down in the middle of the earth the living and beating heart of a two-year old reindeer cow, so that when the Sami people are in trouble, they can put an ear to the ground and listen for the heartbeats from below. If the heart is still beating, this means there is still a future for the Sami people, and whatever problems they have can be solved one way or another. From the beating of the female reindeer heart deep in the earth there is a line to the beating of the Sami drum and to the ancient times when the songs of the people were developed and performed - the songs that tell the story and continue to renew the Sami people’s belief in the future.”<sup>1</sup>*

14th-17th century (maybe earlier): Tax men called *birkarlar* operate in the northern ranges of the Swedish Kingdom, collecting such items as hides, feathers and fish from the Sámi inhabitants by trading and taxing.

1620: Lord High Chancellor Axel Oxenstierna counsels the Swedish King: “In the North, we’ll have within our borders an India, if only we understand to use it.”

1635-1659: Silver mine in Nasa fjäll. Beginning of mining in Swedish Sápmi. The ore is transported by Sámi and reindeer under conditions of coercion, torture and death.

1673: *Lappmarksplakatet* is issued by the Swedish State to draw settlers to Sápmi by exempting them from taxation and military service.

1751: *Lapp Codicil* regulates the land use rights of Sámi crossing the newly established Swedish-Norwegian border as competing nation States encroach upon Sápmi and lay claim upon their right to tax the Sámi population now considered subjects of the Crown.

1852: On the other side of the Swedish-Norwegian border, a rebellion breaks out in Guovdageaidnu (Kautokeino). A Norwegian merchant (of alcoholic beverages) and a government agent get killed. The alleged ringleaders are executed and others sentenced to forced labour. One of the reasons why this event is considered significant in Sámi history is probably because such eruptions of violence against colonial presence are almost absent in the historical record.

1867: Establishment of the *odlingsgräns* (cultivation boundary) cutting through Sápmi to separate (Sámi) reindeer grazing land from (settler) agricultural land. Although supposedly meant to demarcate the north-western limit for settler agriculture, it does not prevent the influx of settlers as industrialization ensues. With the establishment of the mining town of Giron by the end of the century, the State decisively breaks with its own regulation.

1886 (amended in 1928 and 1971): Reindeer Grazing Act aimed at dividing the Sámi population in ‘genuine’, reindeer herding Sámi belonging to administrative units called *samebyar* who are designated to perpetuate reindeer herding, and all others who are meant to be assimilated. Distinct schooling systems, with ‘nomad schools’ for the reindeer herders’ children, serve to cement the imposed division. Up to this day, this colonial

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<sup>1</sup> Taken from Sámi scholar Harald Gaski’s article ‘The Sami People: The “White Indians” of Scandinavia’.

divide-and-conquer legislation continues to discriminate between professional reindeer herding Sámi with *sameby* membership and special land use rights and others, and has had a lasting effect on internal conflicts within Sámi society.

1888: First railway in Swedish Sápmi, from Jiellevárre (Gällivare) to Julevu (Luleå) – from 1903 also to Áhkanjárga (Narvik).

1890: Establishment of the Luossavaara-Kiirunavaara Aktiebolag (LKAB) to mine the Giron (Kiruna) and Málmavárre (Malmberget) iron ore deposits, Europe's main sources of iron ore.

1904: Formation of the *Lapparnas Centralförbund* to agitate for Sámi emancipation. One of the main instigators is Elsa Laula, author of the pamphlet '*Inför lif eller död?*' ('Do we face life or death?'). In her activism, Laula addresses issues of land rights and assimilation and strives for pan-Sámi and women's organization.

1921: Establishment of the State Institute for Racial Biology at Uppsala University. Although not primarily concerned with Sámi, the institute conducts cranio- and other biometrical research on living Sámi individuals and unearthed skeletal remains and encourages the spread of scientific racism.

1977: World Council of Indigenous Peoples conference takes place in Giron (Kiruna).

1979-1982: On the Norwegian side hundreds of people, including local Sámi, Sámi from across the borders, Norwegian and international supporters, maintain a blockade to protect the Áltá River as the Norwegian government wants to dam the river despite outspoken opposition from the local population. Up to 10% of the Norwegian police forces are mobilized, hundreds of people get arrested, Sámi from across the borders are deported. The blockade, hunger strikes in Oslo and an ill-fated bombing attempt of the infrastructure turn out to be insufficient to prevent the dam from being built, but the Áltá conflict becomes an important landmark in the political manifestation of the Sámi against colonial subjugation.

1993: Establishment of the Sámi Parliament (*Sámediggi* in Sámi; *Sametinget* in Swedish). The parliament yields no legislative power whatsoever, serves as a forum at best, an obfuscatory veil of neocolonial reality at worst. Equivalentents exist in Norway, Finland and Russia.

2013: Blockade of the Gállok site in resistance to test drilling. The Sámi Parliament reads out a statement in opposition to the "ongoing exploitation of Sápmi".

2020: In the Girjas case, the Supreme Court of Sweden rules in favour of the Girjas *sameby* in a ten year long legal dispute with the Swedish State. The exclusive right to manage hunting and fishing in their herding areas above the *odlingsgräns* is transmitted from the State to the Girjas *sameby*. It is considered an important legal precedent that could be replicated in lawsuits by other Sámi communities against the Swedish State.

2021: On the Norwegian side of Sápmi, an already licensed and constructed windpark on the peninsula of Fosen is deemed illegal by the Norwegian Supreme Court as it violates the rights of the ethnic minority in question: another important judicial precedent.

2022: Announcement by Karl-Petter Thorwaldsson, Swedish Minister for Business, Industry and Innovation that Beowulf Mining has granted permission to mine Gállok.

# COLONIAL INFRASTRUCTURE

How the Green Transition means doubled exploitation

*“While Sweden’s mining industry constitutes only around 1% of its gross domestic product (GDP), it is one of the largest suppliers of metals and minerals to the EU and provides over 90% of the EU’s domestic production of iron ore. Moreover, mineral extraction in Sweden is concentrated in the north of the country, and around 98.5% of the value of the mineral extraction is situated on Sami traditional territories.”<sup>1</sup>*

Colonialism – *“states or groups conquest and mastery of, for them, more or less alien territories” and the “practice through which countries with power directly controls countries with less power and use their resources to increase their own power and wealth” – Wikipedia*

Infrastructure – *“facilities and structures who are securing foundational functions in society. Especially, systems for transport of goods, persons and services as well as for energy and information are meant. Infrastructure also includes buildings and real estate structure.” – Wikipedia*



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<sup>1</sup> Lawrence, R. & Larsen, R.K., 2017, ‘The politics of planning: assessing the impacts of mining on Sami lands’, *Third World Quarterly*, vol. 38, no. 5, pp. 1164-1180.

The planned mine in Gállok is but one among many mega projects underway in Sápmi. A text published by the anonymous “Anti-Kolonial Kollektivet” on [kolonialinfrastruktur.noblogs.org](http://kolonialinfrastruktur.noblogs.org) sums up the accelerating industrialization of the region: “new roads, new factories, new mines, upgraded railways, faster deprecation, automated and improved industries” to transform the boreal forests into a huge industrial site are about to deliver the urgently needed ‘Green Transition’.

## Green colonialism

Every day, the forest disappears down the forest roads, down to the paved roads, further on to sawmills, wood terminals, pulp factories and paper mills. Every day, ore and minerals travel along the Iron Ore Line to the ports of Luleå and Narvik. Every day, mercury and arsenic is finding its way out of the waste water ponds of the blasted mountains. Provides nerve damage to animals and people. Gives us cancer and autoimmune diseases.

The wealth of the cities’ does not just grow out of nowhere. With harvesters, excavators, trains and trucks they pick up resources and energy in the colonies and convey them to the urban areas. It is apparent that the flow goes in a one-way direction. From the outskirts of the world system to its center. From the countryside to the city. From the north to the south. From us out here to them in there.

Nothing with this is new. The structure is still based on the same logic of discharge of certain areas and accumulation on others. **Colonialism is not a closed chapter. It has only been changed and made more effective. There are still some groups that directly control areas with less power and use their resources to increase their own power.** It is concrete and obvious. As obvious as the trains that groan by with ore or trucks with timber passing by outside our windows.

The difference is how the colonialism is expressed. The extraction of metals and minerals, the clear-cutting of forest and the establishment of large wind power industries are now portrayed as essential tools for this modern civilization to succeed with a so-called “green transition” to create a fossil-free

world and be able to counteract global warming. This perspective emphasizes that this kind of exploitation is a necessary step in the right direction towards a sustainable and climate-smart society. More concrete: metals and minerals to things like electric cars, solar panels and wind turbines, and trees to bio-fuel and electricity.

But the reality out here looks very much less green and environmentally friendly than the picture painted by the companies, politicians and governmental institutions. The companies are increasing their harvests, and the few real forests that still remain are soon also to be clear-cut, plowed and converted into tree plantations. In parallel with a mining boom that literally is exploding in the north, at the same pace as the drastic increase in the number of wind power industries. Rather, we are witnessing how our landscapes are transformed into industrial areas. We are seeing miles of wind power industries where neither animals nor people want to live, where tons of micro plastics are spread across the land and the turbines are killing some of the few birds of prey that still exist. We are seeing clear-cuts and ghostly mono-cultures of *contorta* pines, a mass extinction of species and a reduced biodiversity. We are hearing the companies and the state’s promises of wealth and prosperity – if we just make another mine... – but instead we are left with poisoned landscapes, bodies and minds and another huge empty hole in our hearts.

This is the dirty backside of the so called green transition. This is what hides behind the plastic smile of green colonialism. The process has already begun, a long time ago, and an acceleration is about to happen.

## It’s accelerating

There are great plans for the northern part of Sweden. There are huge investments being made right now, and according to journalist Arne Müller it is estimated that approximately 70 billion euros will be invested only in the “green” factories of Northvolt, H2 Green Steel, LKAB, SSAB and Fertiberia. This

is mainly for the production of batteries, steel and synthetic fertilizers. Together they will need about 80 TWh electricity a year. That’s more than half of the current energy consumption of Sweden as a whole which is 140 TWh. I say that again: That’s more than half of the current energy consumption of Sweden as

a whole. Many talk about that the electricity should come from wind power and biomass (that is forest), but according to Müller that seems to be an equation hard to solve. Just to supply these factories with electricity many thousand wind turbines would be needed. Beyond that, there is also a need for bigger amounts of electricity to power all the new electrical vehicles, server halls, to support the cement industry and different refineries etc. The electrification of everything seems to be the solution put forward. Because of that, it is believed and also prepared for, that Sweden's demand for electricity will double or triple this decade. This will put enormous demands on metals, land areas and power lines. Therefore, there are currently also huge investments being made to upgrade the infrastructure in Norrbotten and Västerbotten. Here follows a quick overview of some of these projects of colonial infrastructure.

## Transport

Between Umeå and Luleå, they are building the Norrbotten Line for high speed trains that with its straight stretching, fast speed, and capacity to cope with heavier and higher loads, will be able to contribute to a huge increase in transport of people and goods. They are also working to digitize the whole railway system with the implementation of the ERTMS signal system, which will enable an increase in the density of the traffic. This all means faster and more efficient resource extraction from the colonies to the center. Also the Inland Line (which was created to be a transportation link to and from the most resources rich regions of Sweden with the aim to increase the opportunities for exploitation in the north of Sweden) is now being upgraded the coming years also to increase its capacity. All this means even faster and more effective resource extraction from the colonies to the center.

## Power grid

In Svenska Kraftnät's system development plan, you can read that there are plans to upgrade the electricity grids so that the electricity consumption can be doubled in the next ten years to be able to accommodate the increase in "renewable energy" for the "green transition".

## Wind power

When it comes to the wind power there are investments made on over 10 billion euros right now. The year 2021 it was estimated that they would build 2,2 GW and the year after 2,5 GW further. The industry's forecast is that the wind power production in 2024 will increase to 48 TWh. Then the wind power production would correspond to one third of today's electricity consumption in Sweden.

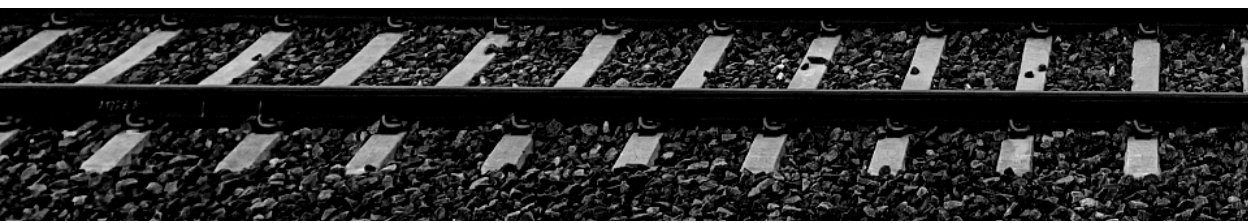
## Mining

But either way metals are required to build all of this (that is mines). Which means Mertainen, Viscaria, Rönnbäcken, Kaunisvaara, Gällök, Sahavaara,... At present, there are 12 mines in operation in Sweden and at least just as many more have now been granted the processing concession of Bergsstaten (the Mountain State). Arne Müller writes: "In total, there are a dozen mining projects that have gone so far in the process that with today's conditions, it is quite reasonable that they actually will begin to mine within the next ten years. Some could get started within two to three years, but for most of them there is more than five years to start. Together with conceivable increases in production at existing mines, it would mean quite a substantial growth in the Swedish mining industry in the coming years." (own translation). He wrote that 2 years ago.

In order to provide some perspective to what is going on in Sweden right now, it can be added that Europe's perhaps biggest annual international trade, conference and meeting point for the mining industry's most important people named "Euro Mine Expo" is organized in Skellefteå. In addition, Luleå Technical University (LTU) together with Boliden, LKAB, Mobilaris, Northvolt, Skellefteå Kraft and SSAB started the project T-25 which intends to increase the number of inhabitants of Norrbotten and Västerbotten with 25,000 people until 2027 to be able to provide all the new industries with the needed labor.

## Forestry

Also in the forest industry, SCA and Sveaskog expand their factories and prepare for increased exploitation. For example are SCA building a new pulp mill in



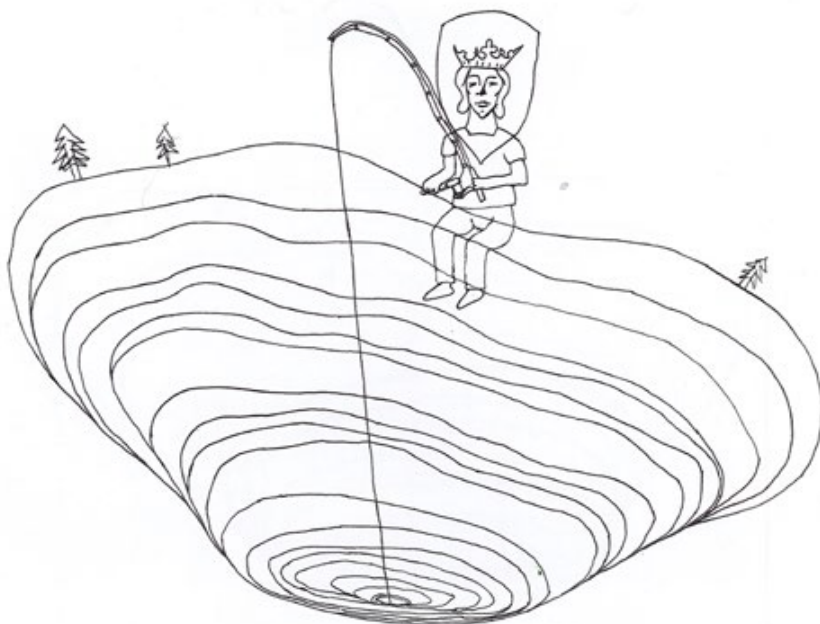


Sundsvall (“Ortviken’s industrial terminal”) which will allow a tripled production very soon, as well as a doubled production at Bollsta sawmill through the construction of a new adjustment plant that is estimated to be completed in the autumn of 2022. The wood industry company Setra, which is a subsidiary to Sveaskog and Mellanskog, are doubling their production in Malå (Västerbotten) by investing about 39 million euros in its facility. In addition, there has just been built a large forest machine factory for Komatsu in Umeå.

**This means not only more but also bigger factories, not only more but bigger mines, not only more but bigger clear cuts, not only more but bigger wind turbines. It is not enough that everything increases in number. The increase is both in size and pace. Faster and more of everything and especially faster and more of the same: colonialism. And together, the whole colonial project keeps pushing the gas to the bottom...**

It is deeply rooted in the Swedish self-image that Sweden is full of forests and mountains, but that reality is being taken away from us. It is more like if nothing drastic is getting done soon all the real forests could be gone in a matter of years. Approximately at the same time as the bedrock in many areas have been hollowed out and the groundwater has been polluted.

*kolonialinfrastruktur.noblogs.org* is a web-page publishing information about the progress of industrialization in Norrland, Sápmi, focusing on infrastructure for the mining, forest and wind power industries. Here you can read about where Sweden’s largest sawmill is located, what mines are beginning to get ready to start, what plans there are for the coastal cities, how the freight transport routes go, where the managers live, and when and where the different industries meet and have their fairs and events. For questions, suggestions, comments and thoughts, please feel free to email us: [kolonialinfrastruktur@riseup.net](mailto:kolonialinfrastruktur@riseup.net)



# “Historically, the government wanted to kill the Sámi culture, now it’s only money they’re interested in”

A talk on reindeer herding in Sápmi’s industrial landscape

*“Ethnocide, unlike genocide, is not based on the destruction of the physical person, but rather on the destruction of a person’s culture. Ethnocide exterminates ways of thinking, living, and being from various cultures. It aims to destroy cultural differences, especially focused on the idea of “wrong” differences, that are present in a minority group by transforming the group’s population into the culture norm of a certain place. This measuring of differences according to one’s own culture is called ethnocentrism. The ethnocentric mind is based on the assumption that there is a hierarchy of superior and inferior cultures. Therefore, ethnocide hopes to raise inferior cultures to the status of superior cultures by any means necessary.”*

- Pierre Clastres, ‘Archaeology of Violence’



The history of the Swedish State's attitudes towards Sámi is an ambivalent one, oscillating between forced assimilation and essentialist othering. From the forced Christianization and boarding schools to racial biology, eugenic sterilization campaigns and the 'Lapp-shall-remain-Lapp'-policy of the 1920's-1940's emphasizing the otherness of the Sámi. From the exclusive recognition of reindeer herders as deserving of special land use rights to the negligence of reindeer herding in rural development programs. From the museification of the Laponian Area Heritage Site to the Gállok mining concession in spite of decade-long protest by the reindeer herders of the Laponian Area.

Over centuries of colonialism, depending on the specific needs of the colonizing force and the resistance of the colonized, colonial subjects have either been forced to march to the drum of Empire or pushed to the margins of Empire, or some combination of both. And those margins themselves get pushed ever further, as a necessary consequence of capitalist development. Indigenous people, with their 'archaic' hunting-gathering, horticultural or pastoral economies defying the imperatives of Progress continue to be a nuisance to the governments of the world-eating machinery of global capitalism.

On the one hand, capitalism's frenzied pursuit of raw materials and land to be turned into profit continues unabated, on the other hand more and more people seem to be waking up to the reality that the dominant culture is driving us to the brink of extinction and start looking at indigenous people – whether real or mystified – to come up with solutions. Even the World Economic Forum has begun to co-opt reappraisals of indigeneity and traditional ecological knowledge. Yet even as we look at *them* for answers, the very preconditions upon which *their* answers are based get progressively undermined – quite literally so – as we keep insisting on *our* 'solutions' in a supreme disavowal of *our* – not *their* – pathology. Whether we are talking about the extractivist plunder and industrialization of Sápmi for the sake of addressing the climate crisis or the luminous plan to turn 30% of the world into 'nature reserves' by expelling indigenous people from their biodiverse homelands for the sake of addressing the biodiversity crisis,<sup>1</sup> we insist on being guided by the will-o'-the-wisp of Enlightenment Progress and ethnocentric arrogance.

As a way of dealing with the embarrassing history of colonialism that is so grotesquely at odds with the humanistic ideologies upon which modern States construct their legitimacy, the United Nations have passed conventions like the Indigenous and Tribal Peoples Convention in 1989, better known as ILO 169. Conspicuously absent from the signatories is Sweden, a nation as proud of its global reputation in terms of social equality, human rights, ecological awareness and global responsibility as it is ignorant of its own colonial history and present.

## Listening to a reindeer herder

Henrik Andersson, reindeer herder in a long unbroken lineage of reindeer herders from the Forest Sámi community of Jiellevárre, puts it like this: "We live in the same country but Swedes don't know anything about Sámi. That is how the government wants it. At school you learn more about American Indians - Sitting Bull and other Native Americans - than about the Sámi in Sweden. I think it is important to spread the knowledge about people still living up here, still reindeer herding, still doing about the same thing as ever - know that we exist at least."

Tor Tuorda explained that historically Sámi used to "live on many feet to survive". Henrik Andersson points out that a present-day reindeer herder has to be as versed in history as in law in order to stand one's ground amid legal and bureaucratic issues and land use claims in modern Sweden. Living and working in

the vicinity of one of Europe's largest copper mines with roads and railroads all around and a mega wind park literally on the horizon, he explains how the practice of reindeer herding has changed over the last generations and within his own lifetime, from being an ecological closed-loop system to becoming ever more trapped in the chains of industrialism.

"There have been a lot of changes over time. In the beginning we had small herds of reindeer and lived self-sufficiently. At the end of the 1800s, with the coming of the railroads and more people coming to the area, people started to ask for skins and reindeer meat and things like that. So we started having bigger herds and selling things to the local people.

1888 was a big happening. Then the railroad came to the mines. Before that the ore was transported by

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<sup>1</sup> See: <https://www.survivalinternational.org/campaigns/biggreenlie>.

reindeer. Unlike Nasafjäll, it was not done by force. It was done for extra income. About 136kg they could get on a sled behind one reindeer, and they had maybe fifteen reindeer so they were pretty fast. So in 1889 the reindeer sporting the ore were unemployed. Then my family at least started with bigger herd reindeer herding. Because then there were also more people coming that wanted to buy reindeer meat and products. Before that every family had maybe fifty, hundred or a hundred and fifty reindeer for their own purposes. But then we started with big herd reindeer herding. It was a really big Sámi community at that time, from the Norwegian coast to the Swedish coast.

Then there are the intruders on the land. Nowadays there are people everywhere, with snowmobiles and roads. In the forest areas we have exploiters all year round, in the mountains it's less. We also have more cities around. And they keep growing. For example in Luleå [Julevu] where I used to go in winter, there's many mountains around the city where you can't be anymore because they are building houses everywhere. All places close to water are built as well. So when you come back from the islands in the sea in spring, you have no place to go to land without going over someone's grass field. When I was small there was nothing, now it's fishing cabins everywhere.

If I have no tracks in my land, no roads, no railroads, then I have easy work. My father and grandfather could do everything on skis. Now every spring Sveaskog and SCA open all the roads and drive cultivators to the clear-cuts in the middle of the reindeer herd when they are calving and birds have eggs.<sup>1</sup> They don't care, they just turn the ground. Historically we only walked and used skis. Even when I started with reindeer herding, only twenty five years ago, my first winter I was skiing. It's only ten years ago that we were still walking behind the reindeer in summer and autumn to collect them. The last ten years we have started using quads because we are so few people [engaged in reindeer herding] compared to how many we were historically.

The Aitik mine started in the 1960's, since then it has been growing and growing. Now it's the biggest copper mine in Europe, I think. The fence around is 44km long. Where there are fences, we have to transport the reindeer by truck and pay for it ourselves. They want to remove three villages for an extension that will only last seven to ten years.

First they took the land for mining, then a railway came in that cut off the north end of our Sámi community. On the road to the mine 200 reindeer are killed every year by cars. The mining is turning the reindeer against the big road that is salted to keep it snow free. The reindeer lick the salt and then the heavy transport comes. Hundreds, maybe thousands, of reindeer die each year on the railroad between the mines and the port of Narvik in the north. On the railroad to Luleå [Julevu] it's about two hundred each year at least within our Sámi community. It's not easy to be a reindeer. When they get killed, we can't go out on the tracks to find them.

Another change is the weather. My father's generation could say there were only a few years that were bad for reindeer grazing because of ice on the lichen. My father has seen two bad years in his career of reindeer herding. My brother has only seen two good winters in his career. The change is very fast from very good to very bad - only one generation. You see the impact of climate change pretty clearly if you know your history."

*Could you explain how that works, with the ice covering the lichen?*

In the beginning of winter snow comes, then it gets hot again and the snow melts. Then it freezes again and becomes ice. Historically we had a reserve plan with the lichen hanging from the trees. But now the forestry companies have taken down big pieces of forests with lichen hanging from the trees. So we don't have so much left of that what we need when the lichen on the ground is covered by ice. Now we need to buy pellets and grass bales from the farmers to give to the reindeer to survive the winter.<sup>2</sup> That is a big cost. A reindeer eats up almost two thirds of the value over winter. So if you have two reindeer, you need to butcher one.

Normally you want to save land for winter grazing for five years - spare it for four years and the fifth year you have the best grazing. But now with all the

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*2 Not only is the fodder unhealthy to the point of killing several calves each year, fodder-feeding also contributes to the erosion of the nomadic lifestyle, enabling the State to counter claims of uninterrupted traditional land use. Reindeer herders thus find themselves in a vicious cycle in which the fragmentation and reduction of suitable grazing ground pushes them toward ever more industrial forms of reindeer ranching which in turn undermines their claims to the decreasing amount of traditionally used land that is left. The implantation of wind parks serves the same effect: it effectively removes reindeer from certain areas and thus breaks up traditional pastoral routes.*

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*1 Too much disturbance can cause mothers to abandon their newborn calves.*



exploitation you have nothing to spare, the reindeer need to eat from all the land all year and you have no savings for future generations. That is not how we want it but how we are forced to have it.

*So you have ever more costs to feed the reindeer, and you need more machinery too than you did in the past?*

Yes, we need the machines because there are so many roads, so many snow mobile tracks, so much disturbance. Also the hunt is a big disturbance. Since they don't have good dogs, they hunt reindeer instead of moose or roe deer or whatever they want to hunt.

*You have many technological advantages now such as snow mobiles and quad bikes. Would you say it is better for reindeer herding now or was it better in the past?*

It was better in the past when we didn't need that, had less costs so you could have less reindeer and a better life. Now there is so much stress and so many people calling, annoyed by the reindeer in their garden so you have to drive there... The acceptance of the reindeer is really bad. People can't accept that the reindeer are running past even if they are living in the middle of the forest. It is hard times for the Forest Sámi communities. Also for the mountain Sámi but at least half of the year they are up in the mountains and don't have these issues with people. They do have the tourists, but at least they have less.

*How do you see the future of reindeer herding in this region if Sveaskog and other forestry companies continue to cut down the old growth forest?*

I see a really bad future. But we know it is a bad future so we have to adapt - smaller herds, maybe more tourists. Reindeer herding will continue, it always has continued, but maybe not as we see it now. At least for now, until the forest is grown up again and restored by the government. It must be restored; it's not only that they need to stop, it also has to be restored, and that will take time. All the forest that we need back takes a hundred years before it is back. So at least a hundred years forward from now, we will have different times.

*Do you feel like the Swedish government is supportive of reindeer herders?*

They don't do anything for us. Sure, if it is for Visit Sweden or something, they are interested in Sámi and reindeer. But they don't even follow their own laws. If we say no to mining, they say yes. They do whatever they want. **I think it's zero percent**

**of the reindeer herders that has any trust in the government.** Even if we win in court, they don't care. The same with the police. I can call in that reindeer have been stolen or driven over by cars or snowmobiles and I don't even get the police to come. When last spring a few activists tried to stop a forest clear-cut, a horrible amount of police came, and more helicopters than they even have in the north of Sweden. But when I report stolen reindeer or a hate crime, they don't even come.

**The Swedish government wants us dead. Because we are in the way of industrialization. We need big untouched land and they want to touch everywhere. They want mining, windmills, forest logging, everything.** They want to take out all natural resources from the land and we want everything to be left. So our interests are in conflict with each other. Fighting against the government is not so easy. We will lose, but we have to find out how to be smarter than the government so we can survive.

*What about the Sámi Parliament? Do you feel represented by them? And do you feel like they have any power over what is happening in this region?*

In 1993 the Sámi Parliament came. Because we fought too much against the government they thought about how to get rid of these irritating Sámi people that come to the governmental building. So they opened the *Sametinget* so all the questions that are sensitive go to the *Sametinget* so they don't have a direct road to the government. And the *Sametinget* then goes to the government so it's politicians discussing with politicians and not reindeer herders discussing with the government.

Some people are more Swedish than Sámi that are in the parliament. We have Sámi politicians in parliament that want mining, we have people in Sámi parliament that are racist. We have SD [Sweden Democrats, a large xenophobic, nationalist right-wing political party] in Sámi politics. It is horrible. You should think that there should be no racism in Sámi politics because we have been abused for hundreds of years. It's only sixty-seventy years ago that our heads were measured. We were a lower standing race.

I have relatives of which I don't think they're Sámi but they're sitting in the Sámi Parliament. They have no thinking of taking care of nature, taking care of the animals, they maybe don't even know what a reindeer looks like, grew up in the south of Sweden with seven to four work, maybe married a politician or a lawyer or whatever and live that kind of life.

The Sámi Parliament has no power. It could be, but

we have to figure out our internal problems among the Sámi. As long as the Sámi parliament has no power, we will only fight against each other.

In 1928 the government put out a new reindeer herding law that excluded everyone that was not doing reindeer herding: the Sámi that were fishing and hunting. Now we have discussions and fights within our own people. That needs to be changed first. But it's not easy when the exploiters are everywhere and all Sámi relatives want to join the communities while we don't even have enough space for ourselves. That is a fight we have between Sámi people: the ones that are outside of the Sámi communities want to come in to have the right to hunt, fish, take wood and things like this, and I understand that but if everyone wants that, someone else must go out because it's already full on all the land. There's no space for everyone to use the natural resources. Until now, it's reindeer herders that have the right, on top of the Swedish population. When Sveaskog's hunters will disappear, then we will have space for more Sámi hunters.

So the main issue is to restore the land. Then we can take in more people into the Sámi communities. But also: it's a lot of Swedes that hunt on Sámi land. If they go away first, then we can have more Sámi people to hunt on Sámi land. Fishing is easier to figure out since there is a lot of fishing water and not so many people that fish. If the land is restored to what it was and all the roads are dug up and all the mines closed, all the cities done away with, then it will be better, then we will have much more space for other Sámi people. Then we will solve the Sámi parliament situation.

*Much of the forest here is cut down by Sveaskog. Sveaskog has this FSC label - Forest Stewardship Council Label - which includes in its policy the following statement: "The organization clearly expresses its commitment to obtain consent before undertaking any management activity where free, prior and informed consent is required." Do you feel like Sveaskog is asking your consent for its forestry policy around here?*

No. It is not a law, it is a certification. They are breaking it many times every day, I think. But nothing happens. The law needs to be changed, not only the certification. It is our role also: we say too little of everything they break.

But if we say no to a clear-cut, Sveaskog has a mission to sell a few percent of their own forest: they sell the one that we said no to and the new owners pay a lot of money and clear-cut. Then Sveaskog

or another company buys it back. If they encounter problems, they go around FSC by selling to some other people or companies. No local people are buying, only stockholder companies can put in the money and clear-cut. They have no FSC-label and can take everything, sparing nothing for the reindeer. Often it is forests close to reindeer corrals that we say no to for many generations or many years. Then it is a conflict area and then they sell it. You hear from many Sámi communities in Sápmi that they are doing this. It's a strategy of Sveaskog to cut down complicated areas for themselves to cut down.

Even if Sveaskog takes down the forest and sells the timber, it will not be counted as clear-cut but as windmill park. So even if they cut down every tree that we have and build windmills everywhere, it would still not be counted. It is strange how they can sell out the land to another exploiter without asking us, when they have this certification and everything.

When I was on a meeting with Sveaskog this spring, they had many maps of where they want to cut. I said: I want different maps, I want maps of restoration instead. They have cut too much a long time ago already. Now it is time to restore.

But if you have been pressed down for hundreds of years, it is not so easy to change the attitude. You're used to not daring to do anything because you're used to always hiding - hiding your culture, hiding who you are for generation after generation. It takes time to get the courage in the people. There's few who dare to say something, many say nothing. They're thinking the same but they don't say it out loud. Forest companies try to press you and squeeze you. I am not allowed to be in any SCA office since four years now because the people who work there 'were afraid of me'. But there are no charges against me or nothing. They try to press down the ones who dare to say something.

*Could you explain what this so-called sustainable forestry looks like around here, this FSC forestry?*

Historically the logging wasn't such a big problem because it was done manually with a saw. Then they cut about fifteen trees per day and they only cut in wintertime. In the 50's and 60's the machines started coming. First the chain saw. They are a little more effective but it's still only a little industry. But then they started with big machines and clear-cuts and ploughing of the clear-cuts.

**Now it's clear-cuts everywhere. All the natural forest is away; we maybe have seven or eight percent left in this area, mainly in reservations. More than ninety percent of natural forest has been taken down. Now it's mono-culture plantations with young trees that grow very fast and thick all in the same age, close to each other. We reindeer herders don't want this kind of forest. We want the opposite: very old forest with space between the trees, spruce trees, birches, pine trees, a lot of variety, that is what the reindeer need. Lichen grow on trees of eighty years and older. The age of a tree that the logging company can take down is eighty. They take it down when it starts being useful for the reindeer.**

Birch was used for everything - skis, sleds, teepees,... It sad now that they take down the forest so young. Much of the handicraft that we make needs old forest, for example the bowls that we make the drums from. With clear-cuts they destroy not only the reindeer herding culture but also the handicraft culture.

To have faster growing forest they looked for alternatives. They tested all over the world different kinds of pine, different kinds of spruce, and then they found in North America *pinus contorta* and planted thousands and thousands of hectares with this tree which they don't know much about. It grows fast but it's not used to the heavy snow that we have up here. They have so many big branches you can't cut them properly with the machines they have. But they get good numbers because it grows up so fast. So they get to cut down more old forest because of their good growth numbers. So it's good on paper for the stockholders and the government. But it's a paper or heating product; you can never make timber from it. In these plantations there is nothing to eat for the reindeer. They don't even go in there at all. It's so dark there. There is no sunlight coming in, everything is dead there.

*You mentioned the issues over hunting rights. Could you tell us something more about that, and how Sámi hunting customs compare to Sveaskog's?*

Something Sveaskog does is to shoot pregnant elk from helicopters to reduce the population that would feed on the plantations. As reindeer herders we have warned the butchering enterprises that we wouldn't sell them any reindeer meat anymore if they collaborate in butchering these pregnant females. Sveaskog also makes huge amounts of money from leasing hunting rights, perhaps as much as from logging. For tourists it costs up to 10.000 SEK to kill an elk buck.

Recently a precedent has been achieved in High Court to transfer hunting and fishing administration to the Sámi community of Girjas. Three more Sámi communities are trying to sue the government on the same grounds. They can use the same documentation as Girjas used. We think we can win it everywhere. But when Girjas won the trial, people started to shoot down reindeer from Girjas and other Sámi communities or they drove with snow mobiles over reindeer and broke some legs. Only because they hate the court decision. They don't dare to hurt us so they hurt our animals. You love the reindeer more than you love yourself. That's why they hit the reindeer. They put on Youtube how they drive over the reindeer and still don't get convicted. Sápmi is like two thirds of the Swedish area, so I think they are really afraid that a decision like Girjas' will happen elsewhere.<sup>3</sup>

Also here: if we say something about the hunt - that we don't want such a long hunting season so the reindeer have more peace to get fat before the winter - there is always someone that writes that they will shoot reindeer, someone does shoot reindeer or does other shit with the reindeer to punish the Sámi people by punishing the reindeer. It's sad but there are many Sámi people that are afraid and don't dare to speak because they think the reindeer will be hurt more. But people who can do such things will do it anyway, because they hate so much.

As hunters shoot elk, predators looking for prey are more inclined to take reindeer. Brown bear take up to fifty percent of the calves in the first living months, as a study three years ago showed. This was the first step of the study. In Sámi culture we have great respect for bears. We say they have the mind of one man and the strength of seven. I have killed a hundred of them and remember all of them.

Then we have step two, when we put the reindeer in a corral after the calves are born. But you can't keep them in a corral too long or diseases will spread. So in a test area we tried to let them out earlier,

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<sup>3</sup> In their article 'Mining Sápmi: Colonial Histories, Sámi Archaeology, and the Exploitation of Natural Resources in Northern Sweden', Ojala and Nordin note: "there is a marked unwillingness of the Swedish state to recognize the colonial ideologies and practices in its relations to the Sámi people through time. In a current (2015) court case concerning hunting and fishing rights between the Girjas Sámi village and the Swedish state, the state counsel has questioned the indigenous status of the Sámi people in Sweden as well as the colonial history in Sápmi, discredited scholarly research on Sámi related issues in recent decades as biased, and furthermore consequently used the old derogatory denomination *Lapp* instead of Sámi during the court proceedings."



saying: we are not a part of this anymore, this is too much playing with our animals, they need to be in the forest. When I see a reindeer in a zoo and it looks like crap, I want to kill it. It is better dead. They eat so many different kinds of food and know which medicinal herbs they need if they have some issues. You can't have them inside or in a corral for too long.

Step three was to kill the bears in the calving area, about ten percent of the total area, to see the result of that. But they said no so we never got to test it. But this is how you can solve the problem. We need ten percent for the calving land and maybe ten percent more around where the calves are the first month. There you need a safety zone. But on eighty percent, there can be as many bears as you want. But this is impossible politically though historically it has always been like that, to protect the calving area. The Sámi have never exterminated any animal that I know of. Also parasites on reindeer, we could eliminate them but we want all species to survive, even if it's something feeding on the reindeer.

*What about wolves?*

It was not the Sámi, it was the government that wanted to exterminate the wolf. And they paid so good money to the people shooting the wolves. They used small planes with hand grenades. Now it's the same with arctic fox. They want habitat for the arctic fox so they're taking out the red fox. All year you can hunt them, however you want.

There are wolves coming from Russia and Finland almost every year. They are good. But then we have these raccoon dogs, also coming from the east. They have the same diseases that wolves can have, but that one we try to exterminate in Sweden because it comes from other countries. You get paid for shooting it and can shoot it whenever you want. The government even imports such ones, puts a gps on them in breeding season and when they have found a partner localizes it and kills it. But the *contorta* which the forest companies want, that is also not from Sweden but they can use it as much as they want.<sup>4</sup>

*4 Due to the controversial nature of the wolf question, we called for a second opinion from Stig-Olof Holm, lecturer at Umeå University on forest management (see further), wildlife biology and alpine ecology. Here is what he commented.*

*"I cannot in detail comment Henrik Anderssons interview, because he may know something that I don't know. As I know is the present extensive reindeer husbandry a major reason for that there is no established wolf population in northern Sweden. It would be very difficult to have wolves in the area, since wolves are hunting the reindeer long distances,*

*Let us come back to the retaliation against Sámi by harming the reindeer. Is that part of a general hatred towards Sámi and your way of life?*

**Even if you're not saying no to mining they will find other reasons to hate the reindeer because they hate the Sámi. In the bottom they are racists. It is sad that it has become like this, but this is the Swedish government's tactic for colonizing Sápmi: get the people up here and in conflict with the Sámi.**

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*spreading the herds, making it very difficult to have an extensive reindeer management. It is a relatively larger acceptance for lynx and wolverine in the reindeer herding part of Sweden, due to that these species tend to hunt the reindeer shorter distances. But I also have heard that the wolverine are seen as a problem, because they are inefficient killers, they cause the reindeer much pain.*

*It's the same in Finland, and Norway - wolves are not accepted in the areas of reindeer husbandry. I think that it is easier to manage the wolf in Russia, where as I know, the reindeer husbandry is relatively more intensive, those who own the reindeer have their animals more close, can protect them better from wolves and other predators.*

*I will add that the Sámi society is now under a large pressure, from the industrial forestry which has converted a majority of the former reindeer grazing areas to clear-cuts and pine plantations, from the mining industry, from increasing tourism, from more of wind mill parks, the rivers have been dammed for electricity production, and so on. So it is this combination effect that thus may make it even more difficult to accept wolf, when the Swedish society's colonization of Sápmi rapidly expands.*

*As you may know there is also a massive hunting down of the Swedish wolf population going on just now because the new Swedish right-wing government, with a large influence from the new fascist party (SD), has taken the decision to do this. They just don't follow the EU rules about protection of this red-listed species. Instead the ruling politicians are listening to the local hunters, which see the wolf as a competitor on the hunters' possibilities to shoot many moose and roe deer. Further, if the forestry companies hadn't converted much of the forests to conifer mono-cultures, there would have been more of deciduous trees, more food for the moose, so a relatively larger moose population could have existed, also with small browsing damages on trees. More moose could have given larger acceptance for wolfs among the hunters. So once again, a reason for the situation is the dominance from large forestry companies on the entire Swedish forest ecosystem, and human society in the north."*

It's a political thing that they could quit directly with. They could make laws against it but they don't. They could send in the police to do something about it but the police is also involved. We have many hate crimes by the police. It's the same police that investigate hate crimes and write these comments when they go home.

If the government fired racists in state owned companies or the police and had no tolerance for racism, be it against Sámi or black people, it would be finished. But it not only continues, it is growing. If you worked in Swedish owned mining and you wrote things like 'You should shoot reindeer' or 'Hit a Sámi when you see them' or things like this, you should be fired, that would be the end of it. But people in State owned companies like LKAB or Sveaskog can be openly racist and still have their job. It's going from generation to generation. The government wants racism. It's harder for us to fight against anything when our animals are always threatened, especially here in the forest where Sveaskog are building roads everywhere that can be used by the poachers.

*How do Sámi people here deal with racism?*

Historically the people have denied that they are Sámi because we look the same as the Swedes, we have no different colour in our face or something. Many have also taken away their Sámi name and lived as Swedes because it's easier to live like that. It's only the last ten to fifteen years that people started to look for their roots and found out that they are Sámi and started to take back their culture. But historically it has been more the reindeer herders, and maybe fishing and hunting Sámi that have been keeping up the culture. Many have gone to 'normal work', changed their last name and tried to be Swedes and try to forget that they are Sámi because they have much easier lives as Swedes. It's easy to hide and be a normal person. The reindeer herders have no choice to hide because we work with the reindeer so everyone knows we are Sámi people. If you go to Stockholm and no one knows you, then you can hide if you want to. I don't want to hide because I am proud of our culture and what we work with.

*How was it at school? Was there also racism there?*

Yes. Mostly on my brother because I already grew pretty big when I was young and, working with reindeer, probably quite strong also. But on my brother they picked more, even though he wasn't so interested in reindeer. Our father was a reindeer herder and everybody knew that.

*Do you think that the racism is going to get worse now that there is a bigger wave of exploitation?*

For example in Jokkmokk [Jáhkámáhkke] it started growing. But there the Sámi culture is pretty strong and there's a lot of Sámi people. But it's a harder climate between the ones that want the mining and the ones that are afraid for the future of reindeer herding. But it's the same in other places, for example around the Green steel in Boden. The wind power has been a conflict in this area for over ten years even if they haven't built a single one yet.

If I take out my Sámi costume and go to Giron or Jiellevárre, I think I get a fight in one evening, only because I am Sámi. In the mining cities it is the worst because the reindeer are in the way of development of industrialism. The racism is worse than you can imagine. It is almost everyday. Since SD [Sweden Democrats] has become more famous, it has become more legal to express hate against other races or beliefs. It feels like the climate has become much harder. But it's also with all the struggles. They see us more in newspapers and there are famous musicians like Sofía Jannock, Jon Henrik Fjällgren and Maxida Mäarak who take the struggle outside. When you go to the south, it is opposite. It is also hard because then you are like a donkey in a zoo or something.

*What of tourism in Sápmi?*

With tourism there are two sides of the coin. It brings in extra income that some are dependent upon but it's also a disturbance. They want to drive snow mobiles or dog sleds and disturb the reindeer herding. Actually we don't like it but it's one way at least not to work in mining. It's only the second worst. Of mining it is easier to say you don't want it. You don't want tourists either but still you need some extra income because the land is clear-cut and you need to give extra food to the reindeer. You need some income from somewhere.

It depends on the situation and the group. If it's a small group, a family, with small children for example, and you can teach the children about reindeer herding, then it's fun. But if it's a big bus with people who take pictures of you for ten minutes, then you feel abused. But they could also spread the word about Sápmi, the questions of mining and clear-cutting. But mass tourism like in northern Finland is horrible I think. There are also many in tourism that use the Sámi and sell fake Sámi costumes and play Sámi for the tourists. I know of people that are not Sámi, have no Sámi blood, no Sámi relatives, no Sámi beliefs, that sell trips as Sámi.

There's a lot of problems every winter with tourism. Last year one reindeer herder was a little too angry. They say he grabbed a knife and said to the tourists: 'Go from here, this is real, you are disturbing my reindeer.' That is in court now. I don't know what is real, but at least there was a knife involved and people had to run from there. Tourists want to see the real thing and then they go further and further into the reindeer herds. It's hard.

Not only tourists are interested in indigenous people and Sámi affairs, your news value is also increasing.

When exploiters come, we need to fight against it for free. We always try to say to exploiters that they have to pay our costs if they want to know how reindeer herding works. They want to come and take our land and we are supposed to answer their questions and fight against it for free. And as you fight against it, it gets a news value and many want to interview you. More and more things are being put on you to work many days a year: talking with lawyers to prepare a court case, answer to the news, movies, documentaries, it's so much and the pressure on reindeer herders is so high now.

The same with the research world because they see that with the environmental problems, maybe the Sámi people have a solution, maybe the indigenous people at least in the Arctic region have a solution for easing the problems with the new climate. So we need to answer the researchers' questions, we have a lot of students that interview us. So it is a lot and everyone thinks this must be for free. That is a new problem that has come up the last three-four years: you should answer all the questions from your free time or your family time or the time that you want to be in the forest with the reindeer - or: you should be, because maybe there are predators but you need to be on this interview a certain time of the day. We need to use our time on other things, but if we don't do it we also lose because we need to spread our message. I think the Sámi people should join together and make a list that says: if you want to do an interview, you need to restore one hectare of land or you need to go and buy ten books for students in Sweden so they learn more about Sámi people. So we get something back for all the time we sacrificed.

I had a documentary maker here last night and it felt like they were using us for their own purpose, to get money for their documentary or movie or whatever and they count on it that we will do it for free. That is also exploitation, not of the land but of us as indigenous people or little special group of people. It depends on the people. If it's a documentary maker

who is genuinely interested and burning for the case, you can give one year of your life for his project. But if it's someone who is thinking wrong - what you think is wrong - and then you do it for free, it can feel like you are used or raped or something, it feels really bad that someone wants to use you for their own purpose only.

*The Swedish State often prides itself on its Green policy. They claim to be very sustainable in their economic and industrial practices and that to replace fossil fuels a lot of metals are required as well as wind turbines as a renewable source of energy. Could you describe what the impact of Stockholm's way of thinking is on this region?*

All the industries are coming up because we have a lot of power here. With all the dams, most of the power in Sweden is produced here. Now they want to start with Green steel and battery factories. To make this steel they need 20% of the power in Sweden just for one factory. A hundred thousand wind mills they want to build for this Green steel. First they clear-cut the forest. Then they build roads where there is nothing to eat for the reindeer - no lichen on the ground, no grass, no lichen from trees. For roads they need mountains or some hard material. Later when the wind mills come up, the reindeer get afraid, both from the sound and the shadow when the sun is shining. They are flight animals. When they see the shadow and don't know what it is, they get afraid. Maybe they think it's an eagle. The disturbance area is a five km radius around a windmill according to university studies. So a windmill can take as much land as a mine.

Struggles are coming because the industries are coming. They are coming because we have power here. When I was at a meeting about Green steel I asked them how they wanted to power the factory. They didn't answer. I think the last rivers that are not dammed already are threatened also.

From our perspective there is nothing good about it. It is only more industrialization of Sápmi's land. We don't need more power in the world, we need less power and less industrialization. We can't continue with this that the economy has to grow, it's impossible in the end. We've had it for too long. We have to go down and back and use less.

**The economy must go down, not up. Not only for the reindeer herders, for everyone. We are taking more of nature than nature can handle.**



# “It is bad not only for Sápmi, but for the whole of Sweden”

## Interview with a Sámi scholar of technology and racism

*“Our tribe has lived far up among the mountainous tundra, in high Norrland, since time immemorial. However, the history of a vanished past relates that we Lapps have not always been required to seek our daily bread amongst the cold mountain tops. Indeed, fragments left behind from a distant era show that the Lapps once possessed spacious grazing land in favourable climes. Over the centuries, however, the Lapp has constantly had to make way for the farming Germanic race. Peaceable, calm, reserved and always content with his lot, the Lapp has left what he had thought was his birth right without protest, and inch by inch the Swedish settlers have taken over the grazing land that once was used by the Lapps.”*

- Elsa Laula, Sámi activist, 1904<sup>1</sup>

In early modern Europe, with the advent of nation States and the discoveries of transoceanic lands, resources and human inhabitants, Enlightenment philosophers such as Adam Smith established a unilineal vision of human history. Central to this vision, which continues to shape notions of progress and development into the current era of neoliberal global capitalism, was the qualification of perceived cultural, economic and technological differences in a hierarchical order of linear development – from primitive to advanced. This eurocentric vision champions the use of human reason for purposes of control and domination of humans as well as the more-than-human world and dismisses cultures that favour ecological consciousness over accumulation as backward in the literal sense of being stuck in an archaic form.

Lands that did not display the hallmarks of civilization - urban centres of accumulation, imperial grandeur, coercion of labour, resource extraction from the rural periphery, etc. - were categorized by Europeans as *terra nullius*: territory yet to be seized by civilized empires with flags, charters, armies, overseers and preferably a priesthood of some sort or other to legitimize the subjugation as divinely ordained. The notion of Progress can be seen as a secular complement or alternative to missionary and proselytic justifications for imperial imposition: supposedly backward, underdeveloped, uncivilized regions had to be ‘assisted’ into modernity.

The constitutive outside of civilization (the negative definition, if you like), is wilderness: an area either wholly unpopulated by humans or populated by ‘mere savages’ ripe for colonization, civilization, paternalism. That is to say: the land is perceived as needy of being put to ‘proper use’ – read: maximized value extraction or exploitation – and the people as needy of ‘being taught manners’ - read: genocide or assimilation and exploitation.

In tandem with the notion of Progress from primitive societies based on hunting, foraging, pastoralism or horticulture to societies presumably based on advanced commerce and later industrialism, a hierarchization of the human genus into different races served to explain and justify the exploitative and coercive relations that came to define global capitalism – the chattel slavery of sub-Saharan Africans being a central tenet of emergent global capitalism as an inherently colonial and racist system. Race would become a matter of philosophical and, later, scientific obsession.

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<sup>1</sup> Translated citation taken from Bjork C. and Buhre F., ‘Braiding Time: Sami Temporalities for Indigenous Justice’. The word ‘Lapp’ was used by Elsa Laula herself in the original 1904 Swedish publication. Nowadays the term is omitted as it is considered disrespectful.

In one foundational work on the subject from the Enlightenment era that embraced a unilinear developmental view of history, called 'Sketches of the History of Man' by Henry Home, Lord Kames, it is stated (derogatory terms quoted from the 1774 original): "If the only rule afforded by nature for classing animals can be depended upon, there are different species of men as well as of dogs: a mastiff differs not more from a spaniel, than a white man from a negro, or a Laplander from a Dane."

Biblical justifications of slavery were gradually supplanted by the epistemology of Science as the latter grew to greater authority in Enlightened modern culture. The discipline concerned with race was called racial biology. From the onset, racial hierarchy was implied in the study of racial biology. Anatomical or phenotypical differences were frantically sought for and emphasized; difference to be conflated with inferiority/superiority. In this tradition, craniometric and other biometric studies were conducted on Sámi subjects as the category of race surpassed the binary division between white civilized Europeans and black 'savages'. White supremacy was refined to a range of phantasmagorical Germanic supremacies. The Sámi of northern Fennoscandia, whose society was not a civilization, whose ecology was not based on accumulation, whose culture and language were neither Germanic nor Indo-European, were deemed to belong to a technologically backward and racially inferior form of the human genus.

Here follows an interview with May-Britt Öhman, scholar at the Center for Multidisciplinary Studies on Racism in Uppsala, a Swedish city that a century ago was the seat of the State Institute for Racial Biology.

*You hold a PhD in the history of technology and currently work at the Center for Multidisciplinary Studies on Racism at the university of Uppsala. Those fields of research might seem unrelated at first, yet in Sápmi we find a historical example of how industrialization and the development of racism go hand in hand. Could you briefly outline this historical relationship?*

Part of understanding technology is that racism and discrimination can be built into infrastructure. This is nothing new. What was put forward in the Time of Discoveries was that people there [in the newly 'discovered' areas] were technologically and scientifically primitive, whereas they actually may have had technical solutions far beyond those of the Europeans. It was an argumentation for the White Western Man to go out to educate and civilize.

This also applies to Sámi territories. It's been the same discourse on the Sámi not knowing their own best or how to manage land and water, whereas Sámi have actually managed land and water for thousands of years. They often refer to this area as a wilderness, but this is false. There is evidence of forest burnings at around eighty years intervals, possible to enhance grazing. Also the reindeer way of grazing itself provides diversity. People here have known very well how to make use of the landscape in a non-destructive way, whereas this colonial exploitation is environmentally destructive. It is not good for the place, it is good for monetary profit for owners that are far away – not for the community or the local environment.

*Racism can be understood as an ideological tool devised by the ruling elite to legitimize the oppression of a supposedly inferior group as well as to divide ethnically distinct subjects. Understood like this, it is no surprise that racism has been actively promoted in Sápmi and continues to be condoned especially in the mining regions where reindeer herding is an abiding obstacle to industrial development. How to address this problem without reproducing binary divisions between 'Sámi victims' and 'oppressive colonial settlers' that misrepresent the complexities of historical and contemporary reality?*

It is important to know that a lot of those referred to as settlers are actually Sámi. In my family you can see this. They were referred to as settlers but they were Sámi who managed to get hold of a piece of land. This was in the eighteen-sixties. But this land was already owned by their family as Sámi tax land. In the nineteenth century the State was taking certain lands for itself and giving others to private owners. So if you wanted to keep your own land you had to register as settler – "nybyggare". They were assimilated in terms of being careful not to mention that they were Sámi. I wrote an article on this about my grandfather's grandmother's sister and her husband who were registered as Sámi – or: 'L\*pps' – and reindeer herders. They too had land but in this process in the nineteenth century they tried to register their land but most likely because they were also registered as Sámi they lost land title, whereas my grandfather's grandmother and her husband were registered as Swedish, though they also had Sámi background, and thereby managed to hold on to their land.

It is not only Sámi ways of life, it is all local ways of life that are being disrupted by pollution and destruction. What I can see is that often it is being described as a conflict between Sámi and non-Sámi, but that is not true. There is a lot of non-Sámi that are also against this exploitation and that are working together, but the only ones that have the right to put it forward in court are Sámi reindeer herders, the Sámi villages, who have specific rights. Those who are not in reindeer herding communities cannot push for their cause in the same way. That's why it looks like Sámi reindeer herders against the rest, but it's not.

*Is it not the case that many inhabitants of the north of Sweden, many settlers, for want of a better word, are employed in extractivist industries such as forestry and mining, based on exploiting the natural environment, that are at odds with the reindeer herding way of life, based on preserving the natural environment? Is there not a conflict between those interests?*

Of course there is. But even reindeer herders are working in mines and forestry and hydro-power. The thing is: at the same time as it is destructive, it creates a dependency. When you destroy the lands, the possibilities for grazing and so on, you have to feed the reindeer and need technical support like motor vehicles. So you need the money to continue reindeer herding while at the same time it is also destructive to reindeer herding. I would say it is a vicious system that is hard to escape. I know there are reindeer herders who refuse to engage in such work, but they are struggling a lot. From the State there is no support – they are mainly creating problems and obstacles such as roads and railroads. There is a lot of things that could be done to facilitate reindeer herding but there is no support for that, it is rather that it seems as though the Swedish State wishes to get rid of the reindeer herding. Which is really stupid: this is local meat production, a culture interesting to tourism and also a very long term sustainable way of food production, as well as a long term sustainable way of managing lands and waters.

*How would you imagine a way out of this vicious cycle? What could a coexistence between Sámi reindeer herding and other Sámi ways of life - such as hunting and fishing - and the livelihoods of the rest of the population look like, if there were a political will towards it?*

First of all: it is not just Sámi reindeer herders who have the right to hunting and fishing, also Sámi and non-Sámi landowners have vast rights. Those who are left out are the ones who are neither landowners

nor part of a reindeer herding community. In Girjas, after the decision of the Supreme Court, the Sámi community has decided not to give any hunting or fishing rights to people who do not live in Norrbotten County. Since Sweden entered the EU, people have been coming into the mountains to hunt for pleasure without taking care of the wildlife or the nature at all.

*Do you see an extension of the Girjas outcome as a way forward towards this coexistence?*

Since land was stolen in the nineteenth century, first of all this has to be acknowledged. The State stole land. It is time to acknowledge and look into what actually happened. People should know this but it is not even taught about nor being discussed. So when Sámi reindeer herders are saying something about these areas they are dismissed as complaining, but they are talking about areas that they have rights to. That is the first step.

I am not a legal specialist but then something needs to be done to look into the ownership rights at the same time as protecting against further destruction. This goes for the Swedish Church as well. **The Swedish Church owns a lot of land and they are behaving as bad as other forest companies.** That is an important point given the apologies by the Swedish Church for their complicity in the colonization of Sápmi. Despite their formal apologies, they are very much involved in an ongoing colonial and ecocidal exploitation of that same region. They have been avoiding that discussion. In their White Paper published in 2016 the editors wrote that they couldn't find anyone to write about the land issues. But they never made an open call for contributions, instead they selected the authors. Myself and others could have written such a chapter - easily. I did criticize this back then, in a review, and I have written to the Swedish Church now again when they had this High Mass, on Lule Sámi territories, in Luleå [Julevu], in October 2022, to apologize to the Sámi. They were doing this in Luleå [Julevu] but they did not invite the Sámi village in whose reindeer grazing area that they were organizing the conference and the mass with the apology. They still have a lot of work to do if they are serious about apologizing. The forest managers of the Swedish Church are not consulting the Sámi villages. They take as much profit as possible without showing any respect to the Sámi reindeer herding, or any other aspects of protecting animals, water and nature for that matter.

*Do you see a conscious strategy behind this – cleaning up their image and in practice continuing the exploitation?*

I think that what they've done is really important because they're indeed taking a step ahead. They've been working with this for a long time. I don't want to dismiss this as hypocrisy because it is working done within the Church that not everyone is approving of. But from Sámi perspective, and as well as for environmental long term sustainability, we need to keep saying they have to improve.

*You mentioned before that the first step is to acknowledge the land theft that has taken place historically. You live and work in the southern part of Sweden, at least part of the year. How much awareness do you perceive in that part of the country for the fact that perhaps half of Sweden's territory is colonized land?*

I think this is not even very well known among Sámi. We haven't learned our history. It is not being taught, you have to learn it for yourself. For other European countries you can easily learn about their colonial history – what they did elsewhere – but for Sweden it is not part of what is being taught at schools nor universities. Historians like myself writing about it is a way of learning, also for myself, but we would need more work to be done to learn exactly how this happened and also to teach about it.

*There is not only the question of an indigenous-settler divide within Sápmi and the role played by the Church. It all fits into the broader context of the Swedish nation State, including its southern metropolitan part. During much of the previous century, Uppsala University, where you work, has been a bastion of racial biology. A century ago the State Institute for Racial Biology was established there to further the study of eugenics, racial hygiene and the supposed inferiority of Sweden's colonial Sámi subjects. Is it significant for you to be studying the phenomenon racism specifically at Uppsala University?*

I was a student in Uppsala in the nineties and didn't know anything about it at the time. When I came back in 2008 I was already a PhD and researcher and learnt from a historian of science about the pictures and the archives that are there. That is how I came to learn about it. Since then I started to realize I needed to do something though I didn't know what exactly. I had studied hydro-power development and exploitation in Tanzania for my PhD thesis. For my postdoc research I applied for and received funding to look into the hydro-power exploitation on my own river, the Lule River. I have seen that it is obvious that both colonialism and discrimination were part of this exploitation. When Uppsala University established the Center for Multidisciplinary Studies on Racism,

CEMFOR, in 2017, I found a very important platform to continue and develop the analysis and discussion on how hydro-power exploitation and energy systems can be part of colonialism, racism and discrimination. It was important to find a platform from where to work that directly speaks to analysing and studying racism. You don't have that elsewhere in Sweden today, I mean, where you can actually acknowledge the concept of racism, and study the different forms of racisms.

*What is your view on Sweden refusing to ratify ILO 169?*

I am no legal expert, so I don't know what it would mean if it were ratified, whether Sámi views would really be taken into account. Norway has ratified the ILO 169, but there are still problems for Sámi on the Norwegian side of Sápmi. Ratifying it would show that the Swedish parliament is actually starting to recognize Sámi rights, so other things would hopefully come along. But the actual implications: I am not able to tell of its importance, as again, I am no legal expert. However, I do believe it is of importance, to have it ratified.

*It seems like acknowledgment of Sápmi has been increasing over time, and such institutions as the Sámi Parliament have come into existence. Yet one gets the impression that nearly all concessions that have been made towards Sámi self-determination, perhaps with the exception of Girjas, remain limited to culture and the symbolic affirmation of identity – things that can easily be absorbed by the neoliberal State – but control over land use and the environment a living culture ultimately depends upon, remains in colonial hands. Is that a fair impression?*

Yeah, but not only colonial: also destructive. I think that is the most important thing to state. I think most Sámi wouldn't have a problem if the land was managed in a good and long-term sustainable way that allowed for local communities to flourish. I think if it were well-managed, Sámi wouldn't be protesting. But it's not: it's a continued exploitation which is destructive and unsustainable. That is the main problem.

*You have collaborated with indigenous scholars from around the world. Do you see any parallels there?*

It is similar. **This colonial way of relating to land – or rather: not relating, not taking into account livelihoods, animals, fish, water, humans – is the same. It is profit for a few people who are living far away and don't bother if the water is polluted and the land destroyed.** They don't care as long as



they get money into their bank accounts. People who live on the land want it to be possible to live there for themselves, the future generations, and also for non-humans. It is the same around the world.

*Some see the Sámi Parliament as a step towards emancipation, others see it as a deterrent in the sense that it serves the neo-colonial purpose of obscuring actual power relations. What is your take on that?*

I was a deputy member for four years. The yearly budget to do political work was 50.000 Crowns [5.000 euro], for the party that I was member of, which had then four seats out of 31. That's nothing. Swedish political parties have a lot more money to work with and promote their political point of view. The Sámi Parliament is important to make statements and try to influence, but it doesn't have any actual political influence, no decisions can be made by the Sámi Parliament. All the decisions will be made by the Swedish government, and the Swedish Parliament. It is like a hostage situation, as at the same time it is important to have the Sámi Parliament, there is not enough money. It is more like NGO-based work where people are supposed to work for free. It is also a pretty clever way of making Sámi preoccupied with continuous conflicts between themselves. The main conflict line is reindeer herders and non-reindeer herders, those that are angry that they don't have the same rights for hunting and fishing. **So people are busy having this conflict whereas the whole Sámi community has a more important conflict: the main conflict is with the Swedish State and its destructive and unsustainable ways of managing lands and waters, as well as culture.**

*Yet sometimes very strong statements are being formulated. On August 28, 2013, the Sámi Parliament read out a momentous statement in Gállok, listing a series of demands, such as: "that legislation will be changed in a way that prioritizes the Sámi's need to access unpolluted land and water over the profit interests of foreign venture capitalists." Such demands, it seems to me, amount to a rejection of the very essence of the bourgeois capitalist project, the globalization it enforces and the priorities it sets everywhere in the world. These demands have been ignored by the Swedish State that has continued to grant prospection and exploitation concessions through an extremely neoliberal mining policy. Do you see any way to enforce such demands as long as actual power – legislative, executive and judiciary – resides fully in colonial hands, through the development of some kind of counter-power?*

I don't have any easy-fix solution but I see a problem in the way the Sámi Parliament is being organized today, both in terms of how little money is available for actual political work – if you see how much money is taken from Sámi territories it should be possible to fund Sámi political work better – and how it is structured in being both a political organization and a governmental authority.

*The resistance in Gállok as well as the recent mobilization around Sveaskog's forestry policy has attracted a fair amount of participants that are neither Sámi nor residents of the directly affected region. Is this something to be celebrated or rather to be viewed critically – in the sense that, after everything else, now also Sámi resistance is at risk of being appropriated?*

If you look into Sámi history, it is important to know that this collaboration with external society dates from far back. Sámi have always been collaborating with others. Sámi were important partners to the other peoples in this territory for thousands of years, have always exchanged with others. The Sámi have been a distinct people but also collaborating, trading and marrying into other families. This is a long-term relationship. Also in the last century, Sámi have collaborated with allies in politics.

Vuokko Hirvonen wrote her dissertation about Sámi women and their work. She writes about the work done by Elsa Laula and Karin Stenberg amongst others in the early 20th century. I recommend her dissertation, it is available in English. There is plenty of other work, alliances between Sámi and non-Sámi over the course of the last century.

*Do you have any advice for outsiders on how to approach Sámi matters respectfully without imposing themselves too much on matters that are not really theirs?*

Learning more about Sámi history and traditions is really important. And also knowing that Sámi are not a homogeneous people – there are really different individuals, families and areas. Knowing also the history of forced displacements. The Jokkmokk [Jáhkâmáhkke] area, where Gállok is, is Lule Sámi traditional territory. But due to the forced displacement in the twentieth century, there is also North Sámi presence in the area. People coming from the outside need to know the local history and conflict lines. Otherwise they might be supporting one but not the other. That is something that I have seen. During the Gállok manifestations in 2013, there were occasions when certain persons, outsiders, would not acknowledge me as a Sámi because I

am highly educated. That is also very problematic: rejecting scholars because one expects Sámi to not be highly educated within the colonial system. Sámi have always been part of society and we've had many prominent persons back in history but somehow, when we are not reindeer herders, our Sámi identity seems to not be acknowledged. **The idea that Sámi are only reindeer herders is from the Swedish State. If people coming from the outside don't see this, they are reproducing and reinforcing colonialism.** So acknowledging Sámi presence, diversity, competence and expertise is the most important. And learning. A lot is written in Swedish, Finnish or Norwegian but I and others have also written in English to make this knowledge available to more people.

*The aim for our project is to contribute to this educational work. Is there anything in particular you would like to convey to our readers?*

When I teach and write, what I am trying to make people understand is that Sámi were also present in the south of Sweden with open Sámi identity. **Deportation and ethnic cleansing of Sámi in the south of Sweden started in the 1600's when the modern Swedish State was recently established and expanding. Sámi were pushed to the north or assimilated to become Swedish.** Knowing that Sámi presence is all over the Fennoscandian area is important. And then understanding: how come that the Sámi, once important partners, become colonized and oppressed? Knowing the long term history is important, and then seeing how from the nineteenth century it's about taking the territories, the lands in the north, for forestry, mining, hydro-power, industrialization. Racism is part of that: declaring the Sámi as primitive and not having any expertise so you can take control and try to wipe out the languages, turn people into 'proper Swedes' controlled by the Swedish State and make them acknowledge that Stockholm is the centre of power and make them submit to this power.

But Sámi have always been able to lead a life from their own lands and waters and are not ready to just take orders from Stockholm. That is the main problem: that people want to live their own lives and not be controlled.

*Henrik Andersson, a charismatic reindeer herder who has attracted a fair bit of media attention onto his person, has pointed out that he has been confronted with an additional form of exploitation: often poorly informed journalists who lay claim on a lot of his precious time to then sell his story. Similarly, in the field of academia, increased scholarly interest*

*in Sámi related issues always bears the risk of commodification of colonial subjects' perspectives and struggles. How can journalists and academics become more respectful reporters or better allies in the struggle against the annihilation of Sámi ways of life?*

What I think should be done, is to turn the perspective. Sámi have been speaking up and challenging the oppression and exploitation at least since 1904 with Elsa Laula's publication. This has been repeated over and over again since 1904 until today. Still, the focus is on the Sámi to interview them over and over again, and say the same things over and over again, but never interviewing the power-holders and asking: Why are you not listening, why are you not changing? That would be helpful: start asking the questions to those in power. We are just repeating ourselves and it gets tiring, time-consuming and nothing happens. The unsustainable and destructive ways of relating to lands, waters, humans and non-humans is allowed to continue, and even be reinforced.

*Well, I have one more question, if that is fine.*

Yes.

*In another interview, with Gabriel Kuhn, you concluded: "The traditional Sámi way of life is sustainable, and while we cannot return to the past, we can use our knowledge about the past to head into a better future." I wonder: is the industrial development of Sweden compatible with a better future for Sápmi?*

It is bad not only for Sápmi, but for the whole of Sweden. The Sámi stand out forcefully criticising but it is the same in the south and on Gotland. In 1991 the legislation on mining was changed. Until then, any mining enterprise would pay 50% in tax from profits to the Swedish State. Now any profit is paid less than a percent. And Swedish tax payers actually pay for foreign companies to come here and to extract our natural resources, and take the profit outside of the country. It is not profit for Sweden as a State either. Not for Sámi, not for Sweden: only for – mainly foreign - investors and shareholders using Swedish lands and waters and Sámi lands and waters, taking the profit and leaving destruction. I think listening to the Sámi would be good for the entire Sweden. **This way of managing lands and waters is not supportive of this country at all. It is really bad management. It is insane that people are accepting this, but I think it is because they don't know. Instead it is packaged as "green transition", as it is good for us all, while it is both ungreen, and destructive, leaving us all poor.**



## A FEW WORDS ON DECOLONIZATION

What would a decolonization of Sápmi mean to you?

*“More than 100 years of Swedish historical scholarship offer plenty of evidence that Sweden fully participated in European expansion and shared in all its bolstering arguments. But what differentiates Sweden from, for example, Britain and France is that there was no decolonising moment, during which Sweden had to rethink its position. [...] This also led to a lack of interest in the ways in which Swedish rulers, subjects and citizens continued to serve and benefit from colonization, through trade and various forms of exploration and exploitation.”*

- Gunlog Fur, ‘Colonialism and Swedish History: Unthinkable Connections?’

Among the many limitations of this publication is the lack of a deeper survey of Swedish colonial history, in Sápmi and across the ocean. In the final interview we will briefly come back to this matter, but all in all it is only touched upon superficially. Let this be an invitation to the readers to delve deeper into the matter themselves. The authors’ impression is that several layers of rosy blindfolds may have to be peeled off. Whether we are talking about the Swedish Church apologising for historical injuries while continually injuring the forests still under their colonial dominion, the green-washed marketing of nearly every consumable item in the country or about a toilet for physically disabled people on top of the rocky summit of a mountain overlooking Europe’s largest open-cast copper mine located on stolen land – one cannot help but wonder whether this is self-satire of the politically correct colonial welfare society, or a matter of bad faith.

Another limitation of this publication is that it cannot represent the wide range of positions and opinions held within the area we are dealing with, and that we ourselves are blinded by an outsider perspective. In the previous interviews we talked to two Sámi interviewees coming from two places that are nearby as much as they are far apart: reindeer herder Henrik Andersson and academic May-Britt Öhman. A final question we asked them, is what a decolonization of Sápmi would mean to them. Additionally to their answers follow two more perspectives: from a young reindeer herder of Maskaure *sameby* by the name of Daniel Barruk, and from Sandor Lindström who lives in the village of Jörn in Västerbotten, and has mixed heritage. After their answers follows a statement from the Sámi Parliament read out in Gállok in 2013.

## Sandor Lindström

“I think it would mean different things for different people. For me personally language is a big question because language is such a big part of culture. I think it’s important to take back Sámi heritage by learning the language, also Meänkieli that they speak in the Torne Valley. I think it is an act of resistance to speak the language of your cultural heritage. I was at this poetry slam meeting in Jokkmokk [Jåhkåmåhkke] where there was an open stage and someone started reading in Swedish. It felt like he was a bit insecure and then he switched to Lule Sámi and you could just see how empowered he got. For me it’s the opposite: I am trying to learn Ume Sámi and I am really insecure about it. But for me it has been important to realize that we haven’t been Swedish for that long time and that the Swedish culture is the one that came here last.

I think it would also help if people could understand their roots, their heritage and feel more solidarity for what is happening to the reindeer herders, because I think they are the most exposed Sámi culture. For me it has changed my feeling of being an ally when I realized I also had Sámi heritage.

I think that when people take back their cultural heritage and realize that we are not Swedish, the resistance against exploitation will increase. But if we talk about the bigger picture, people in the north always talk about changing the tax system because now we are paying higher taxes but don’t get the same kind of welfare that you get in the south. So I think there have to be law changes, changes in taxes and more areas that we control and are not controlled by the State. That would need ratification of indigenous laws and regulations.”

*You have given a talk at this gathering in Gállok where you addressed how people from the south that want to engage somehow with struggles in the north can become better allies. In engaging with these struggles, an involuntary reproduction of colonial practices can occur.*

“I think there is a big risk in coming to a place and not knowing the local history surrounding it. [At a protest camp I went to] there were not many local people involved. It felt like the people from the south were saying: ‘the local people are not protesting at all’. It felt like they were looking down on them instead of trying to understand how hard it is for the locals to protest. It is a really small area where everyone knows everyone. If you protest, everyone knows where you work, your family, your kids. I think it is also important not to destroy local businesses of local forest workers and understand that people working in forestry are not well educated, well paid academic people that can do research instead of doing forest work. Act together with the locals so you know you are doing it for them.”

*We are making this document as an attempt to inform people in the south. Is there anything in particular you would like to share that could help to lift our ignorance?*

“No. Learning in general. I have been reading a lot of books by local authors. That has been really helpful for me to understand the history.”



## Daniel Barruk

“It’s a large question. I’ll try to break it down as much as I can. It would mean a change of mindset. First of all we would have to try to take back things we’ve lost and are losing in our culture. We are losing our language. We have to take back our language. We will have to change our eyes. We have lost contact to how we look upon nature, our language, the reindeer herding process as well. I think we would have to do that by looking back at how it has been. When colonization has gone so far, it is hard to know how much you have been colonized.

From the outside you would have to change the structures, the Swedish laws. We would have to go back to how it was in a way that would be possible today. The main thing is a change of mindset - stop accepting certain things you see. In Sámi places, on Sámi mountains, they put up signs with names in Swedish. That place has never been Swedish. Stop accepting this. Tear down the signs and write the Sámi name. We have to stop accepting things.”

*Is there anything you would like to say from your perspective to people in the south of Sweden or beyond?*

“The only thing I can say, and it’s easier to say it than to actually do it, is to really listen to the person you meet and really listen to the culture they are from. I think that you will benefit from it yourself.”



## **May-Britt Öhman**

I would be more pragmatic. First of all: stop destroying. You should be able to live off the lands where you come from, and not rely on imported food and vegetables. If lands and waters are destroyed and polluted, that will not be possible. I don't know if I would call that decolonization: it's just a better way of life than what is going on today.

Then, Sámi history, tradition and knowledge should be taught in universities and schools. That would be decolonizing universities and the education system. Also for Sámi to be able to learn our own traditions and knowledge. The whole colonial system is rupturing the learning from generation to generation. We need to know our own way of life as being sustainable, but we, who are outside of reindeer herding, are not learning it anymore. So relearning and reclaiming our ways of life and respect for nature would be part of decolonization. If respecting nature would then become part of the management of lands and waters, there would be no problem anymore.

## **Henrik Andersson**

Dig off the roads, take off and melt down the railroads, make shovels and axes and give them to the people that live up here, take down all infrastructure, no cities would be allowed to be. It would need to be like in the old time: living in and by the forest, doing as little impact as possible.

If you look at Sámi leftovers from history: on a tree someone has taken the bark, or a ring of stones where a teepee has stood. That's the leftovers from the history of what our people have left over maybe ten thousand years. If you look at the leftovers from industrialization, it's totally different.

We don't need to own the land, we want a veto right on what happens to the land to plan for the future.

*Do you have any message for people living in the south of Sweden or beyond?*

Leave Sápmi untouched. All the mining and windmills, all this shit, you can quit with this. We see how climate change is coming, we can't continue how we have done before. We need to save energy. We need to go back in time and learn the basics of how we have lived before. All industrialization is better to quit with. Start with small scale farming, doing as little impact as possible. We have always used the forest for our buildings, our sleds, whatever, we have always used it, but not overused it. We need to go back to that.

# “The Sámi Parliament Can Not Accept Further Exploitation of Sápmi”



*The following statement by the Sámi Parliament in Sweden was read out in Gállok on August 28, 2013. It had been adopted unanimously in a plenary session the day before.*

*(Translated by Gabriel Kuhn from the Swedish version published on [www.sametinget.se](http://www.sametinget.se).)*

## **Declaration by the Sámi parliament (read out in Gállok)**

In connection with the ongoing exploitation of Sápmi by mining enterprises— including the test drillings in Gállok near Jåhkâmáhkke and the plans for a mine in Raavrjohke near Dearna, which are obvious breaches of the Sámi’s human rights as well as their rights as indigenous people to control their own culture, land, and environment—the Sámi Parliament in Sweden demands...

- that the Swedish state stops all prospecting and test drilling, and does not issue mining concessions, until it is ensured that Sweden respects the international agreements on the rights of indigenous people, especially the principles of “Free, Prior, and Informed Consent,” which need to guide all decisions that affect the Sámi people.
- that the Sámi Parliament is granted actual power over Sámi land.
- that legislation will be changed in a way that prioritizes the Sámi’s need to access unpolluted land and water over the profit interests of foreign venture capitalists.
- that national interests are reevaluated in ways that prioritize long-term interests over short-term profits.
- that sustainable environments are of the highest priority, enabling current and future generations to maintain their culture, ensure physical and mental health, and practice traditional livelihoods.
- that the environment necessary for Sámi livelihoods such as reindeer herding, hunting, fishing, *duodji*, tourism, and others to flourish must not be threatened by short-sighted exploitation, and that the right to reindeer herding protected in the Constitution is respected.
- that cultural and psycho-social consequences must be considered in all political decisions concerning Sápmi.





# ECOCIDE

## IN SWEDISH-OCCUPIED SÁPMI

*“I used to think that one could avoid involvement in the antisocial consequences of science simply by not working on any project that might be turned to evil or destructive ends. I have learned that things are not all that simple, and that almost any scientific finding can be perverted or twisted under appropriate societal pressures.”*

- Arthur Galston, plant physiologist and bioethicist

In the previous section we have focused on the colonial character of the exploitation of Sápmi – its history and colonial continuity, of which Gállok is but one of the most recent manifestations. To this end we talked to different Sámi people. Insofar as it has not shimmered through yet in the previous section, in this section we look deeper into what could be called the environmental side of this exploitation by talking to natural science experts. In truth, the division between the colonial theme and the ecocidal theme is an artificial one; they belong to one and the same paradigm. Can we not see how the logic of the colonial nation State corresponds with the logic of the monoculture plantation, how herbicide is analogous to ethnocide?

From the perspective of statecraft, revolving around the primacies of order, control, homogeneity and maximized profit, one may have to conclude that the eradication of Sámi culture – the weed within the monoculture – has not been thorough enough. Like herbicides and regular thinning serve to smother biodiversity emerging from the ploughed soil so that the monoculture may rise unchallenged, so the policies of usurpation, assimilation and industrialization serve to smother Sámi culture so that the profit maximization may proceed unchallenged. The most shocking practices of ethnocide as well as the most shocking practices of ecocide may lie in the past; their legacies, however, live on, and more subtle methods continue to serve the same purposes.





As we make use here of the term ecocide, it is worth spending a few words on its meaning and origin. According to Cambridge Dictionary, ecocide means as much as: “destruction of the natural environment of an area, or very great damage to it.” Clearly, such acts as blowing up a mountain or clear-cutting a forest can be considered acts of ecocide. Etymologically, the term is derived from the Greek *oikos* (home) and Latin *cadere* (to kill), which reminds us of the fact that we are not talking about anything more abstract than the annihilation of home, the destruction of the seat of life. Looking into the origin of the term, a direct connection can be established to what has been done to the boreal forests of Sápmi.

The term ecocide was coined by Arthur Galston, the tragic hero of plant physiology whose name shall for ever remain associated with the inadvertent development of the defoliant known as Agent Orange. Confronted with the mass-destructive application of his bio-chemical research in the defoliation of over three million hectares of Vietnamese forest, Galston spoke out against the use of Agent Orange, calling it an act of ecocide which ought to be banned by international law. Galston’s neologism was picked up by Swedish prime minister Olof Palme, who also called the Vietnam War an ecocide at the United Nations Conference on the Human Environment held in Stockholm in 1972.

In the same period as Palme adopted the word ecocide, a herbicide with the same chemical composition of phenoxy acids as Agent Orange, known under the Swedish name *Hormoslyr*, was used on hundreds of thousands of hectares of boreal forest in Sápmi in what scientists have called ‘the war on deciduous forest’ by the Swedish forestry industry. Their method was to systematically kill off such trees as aspen, birch, goat willow and rowan by means of manual as well as airborne spraying. It was only twelve years after Palme’s denunciation of the Vietnam War as an act of ecocide that the Swedish government under Palme banned the use of *Hormoslyr* aka Agent Orange in the forests under its own colonial dominion. This happened only after a popular direct action campaign that occupied forests and airfields had put sufficient pressure on the political establishment. A propaganda campaign including the televised drinking of Agent Orange by forestry lobbyists failed to ward off the ban on *Hormoslyr* under Swedish law in 1984.<sup>1</sup>

The companies involved in these acts of Agent Orange based ecocide are the same as the ones presently clear-felling what is left of the boreal forest to then plough the soil, plant monocultures and mechanically thin out the same undesired deciduous tree species that they used to spray to death. It is the same companies that consistently make a charade out of their professed dialogues with Sápmi’s indigenous population as they continue to despoil the reindeer herding grounds. It is colonialism and ecocide by subtler means than burning people and flying Agent Orange spraying aircrafts. It is colonialism and ecocide yet.

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<sup>1</sup> See the open-access article by Östlund L. et al., ‘The war on deciduous forest: Large-scale herbicide treatment in the Swedish boreal forest 1948 to 1984’ (<https://link.springer.com/article/10.1007/s13280-021-01660-5>).





# “The pollution that we in all our activities cause to the waters, we ultimately do to ourselves”

## Interview with a professor in water security

Iron ore prices on the world market are very volatile. In 2014 another iron mine in Sápmi, at Kaunisvaara, was closed due to low iron prices resulting in one of the biggest industrial bankruptcies in Swedish history. It has been reopened by new investors since and produces seven million tons of iron annually. Its managerial board aims to “develop the world’s most sustainable iron ore” while acknowledging the fact that heavy metal leakage is bound to increase over time.

From an environmental perspective, if all goes ‘well’ with a new open-cast mine, loads of public money are spent on soon to be obsolete infrastructure, the ore deposits are exploited for a while, the company goes bankrupt and the limited amount of accumulated waste starts leaking. If things don’t go so well, the company either doesn’t go bankrupt or the mine reopens under new proprietorship, leaks more heavy metals and emits more greenhouse gases. If things go really bad, one has a Rio Doce dam breakage scenario where a whole river basin gets flooded with millions of tons of toxic mud killing some instantly, others slowly.<sup>1</sup>

It was on the banks of Bárgávrrre that we met with Tor Tuorda, listened to the shrieking flight calls of the Arctic loon and the yoiks of Juhán Niila Stålka, the man who loves first and foremost the drinking water of his homeland. It is rare enough in Europe to be able to drink straight from a lake. Are we, creatures whose bodies consist of roughly sixty percent water, aware how precious drinking water is? Bárgávrrre’s gift is freely given. To reciprocate this gift with poison would bring about a cascade of foreseeable and unforeseeable consequences to the health of loon and human alike through the bioaccumulation of heavy metal particles throughout the food chain.

One may have thought: ‘so this Gállok mine is annoying for a few reindeer herders out there – that’s sad for them, but surely the benefits for society at large outweigh the inconvenience for them.’ What follows is an interview with Eva-Charlotta Helsdotter, professor in water security at Uppsala University. She does not seem to think so.

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<sup>1</sup> As the International Women’s Media Foundation reports: “On November 5, 2015, the Fundão iron mine tailings dam failed, pouring 50 million tons of mud and toxic waste into Brazil’s Rio Doce, killing 19 people, polluting the river, contaminating croplands, devastating fish and wildlife, and polluting drinking water with toxic sludge along 650 kilometers (400 miles) of the waterway.” In his booklet ‘Ideas to postpone the end of the world’, Ailton Krenak, indigenous leader and member of the directly affected Krenak community whose homeland lies along the Rio Doce, uses this incident to highlight the tangible consequences of the diametrically opposed indigenous and colonial ontologies that see the river as grandfather-to-be-respected and resource-to-be-exploited respectively.

*On the 22nd of March 2022 the Swedish government announced its decision to grant Beowulf Mining its long coveted license to mine Gállok. What was your reaction upon hearing the news?*

I felt sad and disappointed but not really surprised. It was kind of expected as a continuation of the Swedish State's colonial way of treating Sápmi. It is continuing the exploitation of land and water resources. So it wasn't really a surprise although it is really sad that they haven't really heard anything – it hasn't really reached the politicians in the Swedish parliament.

*Do you think that the concerns that you and other people have communicated have never reached them or do you think that they have just not been interested in acting upon that?*

It's difficult to say but I have a feeling that the arguments from Beowulf, other mining companies and the mining lobby are much more considered than the protection of land and water resources for the rest of the people.

*Maybe we can start by looking into the environmental consequences that are connected to the Gállok mine. Could you name the most important damages and risks involved?*

There is a huge risk with having a mine and tailing dam in a river which provides ten percent of the electricity here in Sweden. A tailing dam upstream has a really high risk. **The Lule River is the supply of drinking water for more than a hundred thousand people. Which means that a pollution of the river will be of huge consequences for people taking their drinking water from the river.**

There are lots of other environmental consequences as well, the energy requirement is huge, the pollution of dust and carbon dioxide is also huge. So I mean: if it's really important to protect the environment the decision should have been different.

*We have been told that mining debris deposits inevitably start leaking after some time. So we're not just talking about a risk but an inherent quality of mining in this way. Can you confirm that?*

I would say it starts as soon as you start mining. You blast and get nitrogen pollution from that. Then we have to think about the heavy metals that have been encapsulated in the rock – if you take it out and crush it, you will have more soluble metals in the water. That is inevitable. There is no tailing dam in the whole world that contains no pollution. So it's

not about leaking. **Think of the huge reservoir - if you continuously pollute it with water containing metals and you don't have an outlet it will rise and it will overflow. Compare it to a bathtub. It will continuously have discharge from the tailing dam. All tailing dams work like that.**

*What pollutants are we talking about? You mentioned heavy metals.*

Yes, metals from the mining. Depending on the minerals that they are mining. So all the metals that you can find in the rock that they discharge in the river.

*So they end up in the waterways and pollute the marine ecosystems. How does this pollution manifest itself in aquatic life forms?*

Depending on the metals. For instance copper is poisonous for fish. I am not a fishing expert but I know that from other mines everything downstream will be affected: the organisms living in the river and also the people drinking the water.

*So in the case of Gállok that would be the Lule River system, just one of several of the great rivers of northern Sweden and Sápmi that all flow into the Baltic, which is already considered to be among the most polluted seas in the world, among other pollutants by mercury. The mining boom is bound to release even more heavy metals in that water. Which consequences are to be expected not only on the rivers but also on the Baltic Sea?*

Obviously the water quality of the whole sea will be affected. There are lots of planned mines in Sweden, for instance rare earth mineral mining in Norra Kärr close to Vättern, which also ends up in the Baltic Sea.<sup>1</sup> The whole mining boom is said to be necessary because we need the metals for the Green energy. Transferring to Green energy, that's the story, but in fact it increases pollution of water. It is destroying the environment to protect the climate.

*In an article you published, you wrote: "The pollution that we in all our activities cause to the waters, we ultimately do to ourselves." How to explain the negligence from the authorities even though we are talking about the health of hundreds of thousands of inhabitants of this country?*

The only way I can understand this is that politicians and the government are joining sides with the mining industry. The profits of the mining industry will go

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*1 After local protest, the supreme administrative court withdrew the concession in 2016 (for now).*



to big companies and the government is siding with them; on the other side is the public that drink the water and eat the fish. That's the only way I can see it: they are elected by us but they are not working for us.

*Do you see a role for the media as well in there being so poor information about environmental pollution?*

I would say there are very few journalists that are really critically examining this. It is not so strange: in the end the owners of the big media companies are the same as the owners of the big mining companies. It's the effects of globalization.

*Speaking of which. You have also done research into the consequences of military exercise in Sápmi, where Europe's biggest land base test area is located and aircraft and artillery testing has been conducted by US American and other NATO troops. In typical colonial fashion, reminiscent of the 'what local people?' rhetorical question in the Gállok case, it is claimed that the testing area, roughly the size of Belgium (which, a propose, is actually a NATO member, unlike Sweden, let alone Sápmi), is completely unpopulated. What kinds of pollution are we talking about here?*

It is really difficult to get information about that. It is secret. I don't know what different equipment they are testing and there is no declaration about what is in that type of ammunition or missiles. Sámi people are actually employed to pick up the leftovers from the exercises. It is really strange. You don't know what's in it and you don't know how it is polluting but every drop of water in that catchment area will in the end reach the Baltic Sea.

*If things continue the way they have been developing over the last decades, and the mining boom expands, including the opening of the Gállok mine, how do you estimate the viability of Sápmi for human and non-human life in years to come?*

It is not only the mining, it is the hydro power exploitation, it is the deforestation, it is the 'defense exercise area' and it is also wind power industry which is threatening the Sámi society and the people living in the area. All those activities require roads and railroads so they are also expanding. The threats are so diverse and so vast that it's very difficult to actually continue the traditional Sámi way of living. If it continues like this there will be no reindeer herders in the future because there will be no reindeer herding land, no possibilities to move the reindeer.

*You mentioned forestry as well. It is also a source*

*of aquatic pollution, especially when there is clear-felling and therefore erosion. Could you explain what happens in that process?*

The clear-cutting, as you say, increases the erosion, and that will mean that less and less vegetation will be able to establish itself once you have clear-cut. It is a very sensitive area in which trees grow very slowly so it takes a lot of time for a tree to become big. A hundred years old tree is not that big in that area. In the soil there are minerals that are connected to the soil particles which will be washed out in the rivers and increase the heavy metal load in the rivers as well.

*At an academic presentation on water, pollution and threats against Sámi food security, you addressed the following question: 'Clean and safe water is the key to food security and food sovereignty. How can Sámi/ Indigenous waters be protected from the destructive mining policies in the era of climate change mitigation and the scramble for metals needed for electrical cars, batteries, solar cells, and wind-power plants?' What answers did you come up with?*

I don't really have answers but I have a question: is it reasonable to destroy the environment to protect the climate? As I see it, it is a continuation of colonization and it is also increasing the exploitation of land and water resources, especially in indigenous territory.

*Do you see any alternative? We are in a situation in which so much energy is required to uphold the way we live - even if we were to reduce consumption, we are so deeply dependent on fossil fuels which are threatening the climate. Even when these so-called Green solutions are false solutions, we are stuck with a very existential question: how to fulfill our material needs within this civilization that has already outgrown its own carrying capacity? Do you have any proposals as to a direction in which we could alternatively be looking for answers?*

The first thing would be to really scrutinize the way of life we have. It is obviously not sustainable. The most obvious way would be to reduce the energy consumption and the production of consumables. And that is never really discussed, I would say. It is business as usual and even increased consumption and production. Doing it in a 'Green way' which is not really green can't be the way forward. If we destroy the water we drink, the air we breathe and the land which is feeding us, we are destroying the conditions for ourselves. It doesn't matter how much more products you have or wind power stations. Things can't continue like this.

*This seems to be quite obvious but it also seems like we keep ignoring these rather obvious facts. It seems like people in Sápmi are much more aware of this on an every day basis and that people further south, be it in Stockholm or elsewhere are so deeply alienated from their direct environment that it's easy to forget these very basic truths. So to finish off: is there anything else you would like to add or any message you would like to send to people in the south of Sweden or beyond regarding mining, Gállok, industrialism or anything else in that regard?*

I don't know how to reach people. Maybe it is about your own relation to the water you drink. Where do you get your water, how is it treated? Maybe that's a start. Is it possible to grow food where you live? I mean: get a relationship to how nature is feeding us and how earth is providing us with the things we need. If you take everything for granted... I often find people in cities not even knowing where the drinking water in their tap is coming from. They just assume that there will always be food in the shops. It's not necessarily the fault of people, more of the politics that has been in play for the last decades, maybe century, where people are forced to move to cities because it's so difficult to stay on the countryside. There are no schools, no shops.

**Also politicians are actually not representing those people that elected them but the companies like mining companies or wind power production companies or hydro power production companies.** It feels like politicians are more representing them than the people that elected them. So it is something about democracy as well.

I think it is really important what you do but we as researchers have no funded time to do it and there are so many requests. Luleå Technical University is partly funded by the mining industry so the researchers are mining positive. They receive grants from the mining industry.

*So there is an obvious conflict of interest?*

It's the same with all the universities. I mean, if you look at for instance Karolinska, they are financed by big pharma. You have other funding which is from the government but that's much smaller. That's the way the mining lobby or big pharma work: financing researchers really is a good way of getting your views out.

*Have you noticed personally that they have tried to incorporate you, basically to bribe you, or try to put pressure on the university to cancel your scholarship or anything like that?*

I wouldn't call it bribery, but if you consider that maybe the vice chancellor is from LKAB or whatever, it is a subtler way. I know people who have been bribed but I haven't. It's the inequality – if you compare the resources from the mining industry, big pharma or big agro: they are huge compared to other researchers that try to make a living from protecting the environment. There is very small funding. It is the municipalities that are responsible for clean drinking water. They don't have those kind of resources compared to the mining industry. You should be more aware of who is funding what.

The general public thinks scientific research is objective but you can find any researcher that can do any research. So it's really important to be aware of what the objective is of the research and to realize that there are so many risks around a mine that are not represented in the way that mining companies present the process. **Having a tailing dam upstream a huge drinking water reservoir is really not a good idea. Destroying drinking water is not only a risk, it is inevitable.**

*Maybe just to emphasize the breadth of pollution we are talking about: not only Gállok and the Lule River. It is also the Ume River – Rönnbäcken – and, well, basically every single river except two in Sápmi?*

Those two rivers are not protected either. They will receive water from mining areas as well. All rivers are affected. If you look at the planning maps of the future mining projects, it is really huge. It is a huge problem for us, the people drinking from those rivers and lakes and also for the Baltic Sea.



# Environmental risks with a mine in Gällök

*“The only green mine is the mine you never open. That’s the first thing you have to know regarding this activity. Mines cause major interventions in nature. They cause big environmental risks even if you manage everything in the best possible way.”*

- Arne Müller



*“Extra pipe / waste water / dam 4”. Toxic biproducts released into the water by the Kristineberg mine.*

The following scenarios are based on a presentation by Arne Müller at an online seminar organized by Färnebo Folkhögskola. Müller is a freelance journalist, and the author of several books regarding environmental aspects of mining in Sweden. These are some quite plausible, not too unrealistic, environmental hazards that a mine in Gällök could result in:

- 1) The mountain is full of areas with high amounts of sulphur which forms into sulphuric acid when it gets in contact with the air and contributes to large releases of metals to the water.
- 2) Emissions of nitrogen from explosive residues contributes to the eutrophication of the ground water.
- 3) There will be large amounts of water running into the open pit that have to be cleaned. This is possible but there have been a number of examples where mining companies haven’t done this properly.
- 4) After the company has managed to dig a 375 meters deep hole the ground water level is altered immensely.
- 5) The 10 million tons of raw material that the company takes out is blasted and put through a crushing plant. During the storage of this fine-grained waste material, the wind spreads the dust and contributes to elevated levels of metals in lichens and other plants in the surrounding area.

- 6) The machines in the mine will use 13,000 tons of carbon dioxide (about 31.500 barrels of diesel) annually. Along with the release of 19,000 tones of carbon dioxide caused by transportation.
- 7) The mine will devour large amounts of electricity. By itself it will use 450 Gwh annually, which is three times more than what is produced by the Parki hydroelectric dam.
- 8) The location for the tailing pond (the dam were the waste is stored) that the company has presented so far is problematic. It lies above the area were the concentrator and the mine is. If the dam breaks this involves risks for the workforce. So far it is not clear if a dam break at the tailing pond could affected the water power dam that lies below the mining area. A dam break would lead to an enormous disaster.

These scenarios are more or less likely to happen, but all of them are fairly realistic. We have seen this happen in for example Kaunisvaara, Aitik and other recently active mines.

In the Kaunisvaara mine outside of Pajala a similar dam burst quite immediately after the mine had started. In this mine they also failed to manage the excess of water and released a few million cubic meters of uncleaned water to the surroundings. Before the mine started the company had said that there shouldn't be any sulphur in the ground, but then it turned out there actually was. Also the ground water level there sank drastically.

Also in the Aitik mine close to Jiellevárre a dam failure happened about 20 years ago. In Aitik there has also been studies made on the spreading of dust. It has shown that substantial levels of dust spreads as far as 10 kilometers away. The dust even creates a noticeable impact up to 70 kilometers away where it is still possible to measure that dust from the mine has arrived.



# TOXIC METALS

## Mining and the poisoning of the landscape, body and mind

*"In the forest land's shallow so called shell layers, the levels of metals such as cadmium, copper, mercury, lead and zinc are clearly elevated in most of the country. Around local sources of emissions, the elevated levels in some cases are very strong, with noticeable biological effects as a result. In areas with a lot of mining and metal industry, the forest land locally can have strongly elevated levels of heavy metals. The long distance metal transport via the atmosphere causes more moderate but more widespread levels throughout the country (mainly in the south, but also in the north the elevations are clear)."*

- From the Swedish Environmental Protection Agency's webpage

Facing a mining boom in Sweden this coming decade it's no wonder that people are worried about what effects the toxic metals released from these mines could have on peoples health and well being. From talking to Eva-Charlotta Helsdotter we have learned that through mining activities "destroying drinking water is not only a risk, it is inevitable." But what effects do these toxic metals really have on our health? After countless hours of research, reading through scientific reports and looking into all kinds of online sources we have realized that there is not really an easy answer to this question.

To try to get a better picture regarding these metals' impact on our health we decided to contact Ingvar Bergdahl who is a researcher at the Department of Public Health and Clinical Medicine, Sections for Sustainable Health, at Umeå University. His expertise lies in the health effects of environmental pollution with a focus on metals. When we ask him about the consequences heavy metals can have on our health he start out by saying: "All metals are different. Sometimes people think that heavy metals are some sort of equated poison, but that's not the case. They are very different. Each element is in principle its own thing. From a toxicity stand point you can't put them together. They are totally different things."

Further, Bergdahl elaborates: "Cadmium, lead and mercury have no beneficial effects in our bodies at all. Simply put you could say that they destroy proteins. There are two main mechanisms. One is oxidative stress, which means that the metal can switch oxidation state and contribute to unwanted oxidation of molecules in the body by moving electrons. The other is that the toxic metal can have almost the same shape as a metal that is supposed to be bound to the protein and can take its place. Both these mechanisms can affect the function of proteins."

Bergdahl further explains how substances like lead, cadmium, arsenic and mercury can affect us as organisms. How cadmium increases rates of fractures, kidney damage and osteoporosis. How lead can damage our brains and fetal development. How mercury can get into and damage our nerve system. And how arsenic is carcinogenic.

These are only a few of many examples on what damages these metals can do to our health. When I scroll down one scientific report after the other regarding heavy metals impact on our health there are numerous recurrent references to chronic and autoimmune diseases like Psoriasis, Crohns, Colitis, Rheumatism, Parkinson and Multiple sclerosis, etc. Other harmful effects mentioned are behavioral disorders, high blood pressure, allergies, seizures, cardiovascular disease, pulmonary fibrosis, liver damage, nerve damage, brain damage, cancer and at higher doses acute death.

Bergdahl highlights that the quality of our drinking water actually has improved with municipal water, in comparison to how it was at the beginning of industrialization, and that the acidification of our lands has decreased since the 1980's. But at the same time, he says that the lead levels in our bodies are now 100 times greater, and mercury levels probably 3-5 times higher, than they were during the Stone Age. And most, if not all, of these additional toxic metals actually originally comes from mining.



Although it is unclear which toxic metals contribute to what physical or mental illness, and how it really works, the increased emissions from mines will have direct negative consequences for the health of humans and other organisms. Even if we don't know how these metals are bad for us we definitely know that they are. Bergdahl goes on to explain that the impacts do not always take the expression as a form of "silent spring" where animals and birds die and we become drastically ill, get cancer and die. It can instead take more subtle expressions such as leaving us slightly worse equipped for life's challenges, increasing the levels of inflammation in our body, a slightly disturbed fetal development, an increased risk of heart attack etc.

Over and over again we hear on the news in Sweden that tons of toxic metals are released from mines. For example, in a news report from the Swedish Television in 2010 we read: "Of the thirteen active mines that Västerbottensnytt reviewed, eight emit more than they are allowed to since 2008. Even the closed mines follow the same pattern, where 16 of the 22 reviewed mines have emissions that are dangerously high. It often involves toxic substances

such as arsenic, lead, cadmium, copper and zinc. This can have serious consequences for the environment, says Hans Borg, who is a professor at MIT, at Stockholm University."<sup>1</sup>

Considering that the plans are to both double the amount of mines and expand the already existing mines, and also considering that many of the new mines will be bigger in scale, the amount of toxic waste waters might increase drastically as a result. Not even mentioning the emissions from the the other extractive industries and factories etc. Of course, in nature everything moves, constantly. Through rivers, plants, animals, humans, oceans. These toxins will reach us, wherever we live. It is just a matter of time. How big of an impact will this have for all of us? On the fish we eat? On the reindeer? On the oceans? On our hearts and nerves? On our children?

All over the world chronic and autoimmune diseases, depression and mental disorders are on the rise. The lands and waters are getting poisoned and us with them. Is it really worth it? For what?

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<sup>1</sup> <https://www.svt.se/nyheter/lokalt/vasterbotten/gruvor-slapper-ut-ton-med-tungmetaller>





# “It’s like we are eating an apple and it’s just the inner part left”

A university lecturer in ecology on the unsustainability of the Swedish forestry and growth economy

‘Sustainability’ is one of those words that in recent decades has been hollowed out so badly that it seems to have lost any significance apart from its marketing value. Beowulf Mining, for example, claims to “sustainably produce critical raw materials”. Such formulations are very common, but what do they mean? In the case of Gállok, it is supposed to look like this: digging a huge hole and taking out iron ore to be processed for a projected period of merely twenty-five years. Even if we disregarded all ‘side-effects’ dealt with elsewhere (land grab, pollution, emissions, disturbance, etc.), what exactly is sustainable in taking something away that cannot be replaced? What is being sustained?

The term ‘sustainability’ in modern European languages is often reported to have been coined by a Saxon accountant by the name of Hans Carl von Carlowitz writing in German. Although Carlowitz was a mining administrator, his use of the term ‘Nachhaltigkeit’ did not refer to the mining operations as such but to the forestry surrounding them, for sooner than to be confronted with dwindling ore deposits, he was confronted with dwindling timber availability as the mining and smelting industry consumed whole tracts of forest in the vicinity of the Erzgebirg silver mines under his management. In his ‘Sylvicultura oeconomica’, published in 1713, he outlined the basic principle of sustainable forest management, namely that no more timber should be taken out as will be regenerated in due course - or sooner or later there will be no timber left at all.

Obviously, this aristocratic academic was not the first human being to realize the difference between usage that allows for regeneration, and devastation - as demonstrated by non-civilized peoples across the globe who were never confronted with Carlowitz’ problem that there was no forest left until the likes of forest and mining administrators sent their work forces to those peoples’ homes. At the heart of Carlowitz’ notion of sustainability, however, is the immanently regenerative and productive nature of forest ecosystems. Can we reasonably apply the same logic and the same term to operations that extract once and for all what will not regrow?

And what if we consider the question of sustainability within its original field of forestry and apply it to the Swedish context? Is there perhaps more to it than the regrowth of cubic meters of timber on land designated for forestry? On the banks of Bårgåvrre we were joined by Stig-Olof Holm, university lecturer in ecology at Umeå University. Relying on decades of experience in the fields of forest ecology and forest management, he delivered a foreboding presentation on “the very bad situation with the forestry in Sweden” and its climatic implications. Here follows an edited transcription.



## Is Sweden covered with forest?

*A first question to be clarified: what is actually a forest – and which qualitative differences do we fail to see when we assume that 65 percent of Swedish land surface is covered with forest?*

“If we look at the definition of ‘forest’ that the UN or FAO has, it says that a forest is an area where you have trees that can be at least 5 meters high and cover 10% of the area.<sup>1</sup> Which means that all of the plantations in Southeast Asia or mono-cultures of pine in Sweden or apple plantations also are forests. The definition of what a forest is according to the UN means that it doesn’t have to be a kind of functional ecosystem. I have written proposals to change this. I haven’t gotten any response from them.

If we look at the 65 percent tree cover in Sweden, we can separate the degree of human impact in three categories. We have natural forest which is almost not affected at all. Then we have semi-natural forest that has been logged, it could have been clear-cut, but then has been allowed to regenerate naturally. Then we have the plantations, where the forest has been logged and then been replanted with conifer saplings that have been grown in greenhouses before, then put in rows along the plowed furrows on the clear-cuts.

If we look at the entire Sweden and these three categories, it’s about 2-3 percent of the tree cover that is natural forest, and almost all of this is in the mountain region. Then we have approximately 30-40 percent plantations. What is still semi-natural forest is planned to be clear-cut and converted into plantations. **So the situation is like that: the plan is to convert almost the entire landscape into an industrial landscape with mono-cultures. But we are not there yet.”**

## From ecology to industry, from forest to hothouse

The consequences of this are far-reaching. In a previous interview, reindeer herder Henrik Andersson has explained the poverty of this type of ‘forest’ for the reindeer of Sápmi. But the semi-domesticated reindeer and the herders are not the only ones jeopardized by this forestry model that degenerates ecology to industry.

“It’s a kind of industry that causes the largest negative impact on biodiversity. About 53 percent of the red-listed species in Sweden are living in the forest. It’s mainly the clear-cutting, especially of older forests, that causes this threat to biodiversity. And it causes the largest emissions of greenhouse gases in Sweden. That means that it’s two of these which they call planetary boundaries, where we have the definitive limits how humans affect the global situation. **The forestry in Sweden, as it is designed today, is the single largest threat to the environment in Sweden.”**

It is easy enough to understand that reducing multi-layered and diverse forest ecosystems to monocrop plantations is detrimental to above-ground biodiversity, especially in combination with clear-cutting harvesting methods. Holm explains that what should not be overlooked either is the impact of this below ground, as in the boreal bioregion approximately 60 percent of all carbon is stored in the ground and mycorrhizal fungi massively die back after a clear-cut. The Swedish version of the certification organization FSC (Forest Stewardship Council) recommends that only 5% of the trees in a forest should be left after logging. Research in northern Sweden has shown that this will cause a loss of approximately 75% of all mycorrhizal fungi species.<sup>2</sup> In addition to the decrease in biodiversity, this could also have negative impact on carbon sequestration and other functions of the forest ecosystem.

By clear-cutting, one not only removes the majority of carbon already encapsulated in the trees, it also for a long period abruptly denies further photosynthesis and lays bare a huge surface of henceforth leaching ground: the ground which held the roots and mycorrhizal fungi penetrating all the way down into the mineral soil, which allowed for long term carbon sequestration, now continues to emit carbon into the air 10-30 years after the clear-cut. Recovering the carbon that was emitted due to logging through the regrowth of new trees, the ‘carbon payback time’, takes much longer: depending on site productivity 60 to 100 years, or even

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1 FAO: Food and Agriculture Organization of the United Nations. See their 2020 Global Forest Resource Assessment. Working paper 188. Terms and definitions: <https://www.fao.org/3/I8661EN/i8661en.pdf>.

2 Sterkenburg et al., ‘The significance of retention trees for survival of ectomycorrhizal fungi in clear-cut Scots pine forest’, *Journal of Applied Ecology*, 2018.

more. So the loss of carbon is threefold: carbon captured in the harvested trees, carbon about to be captured by photosynthesis and carbon sequestered below ground. Of course the small proportion saw yield in the harvested timber doesn't immediately emit carbon just like that. It could remain stored in wooden items such as construction material for longer periods. As Holm explains, though:

“The volume of logged tree stems in Sweden was in 2020 about 90 million m<sup>3</sup>. Only about 18 million m<sup>3</sup> became sawn products. And some parts of these sawn products are not lasting for long either because they are used for packaging and such small things. It was only about 15 million m<sup>3</sup> of totally 90 million m<sup>3</sup> that become long lasting. The rest were emitted as carbon dioxide within a few years.

We have a present annual emission from the Swedish forestry sector of perhaps 83 million to 85 million tonnes of carbon dioxide, from direct emissions.<sup>3</sup> It is biofuels that are being burnt. The impact on the climate from the Swedish forest sector is much larger than the total impact of the rest of Sweden's emissions. It's about 16 million tonnes from all other industries than the forest industry. Then we have from the agricultural sector and some others also. If we look only at the industries, we say that paper mills in Sweden emit about 33 million tonnes of carbon dioxide per year, while if we go to the second largest industrial emission source it's from the steel industry which is about 6 million tonnes. The total territorial carbon dioxide emissions from fossil sources in Sweden amounts to about 48 million tonnes. The emissions from the forestry sector are hard to find in the official statistics, because they say it is renewable energy so they don't count it.”

To obscure the tremendous amounts of carbon dioxide released into the atmosphere by the forest industry, all kinds of green-washing tricks have been devised. One of them is to distinguish between 'green' and 'black' carbon dioxide. The so-called 'EU taxonomy for sustainable activities' (2021), allegedly aiming to prevent green-washing, promotes the very same by qualifying the combustion of clear-cut forests as 'sustainable' or even 'climate neutral'.

“Often they talk about green carbon dioxide and black carbon dioxide. What people usually say, is that fossil carbon is much worse for the climate than carbon from biofuels. The idea is that those fossil fuels, like coal, oil and gas have been stored deep in the bedrock for 200-300 million years. Then we have started to pump it up, and have put extra carbon to the ecosphere compared to what has been circulating for millions of years from trees that have rotted. What humans have done since the start of industrialization is that we have added extra carbon to the ecosphere. This is correct. The idea is therefore that it's much more problematic with burning fossil fuels than biofuels. Some politicians in Sweden talk about fossil-free society.

But now something has come in the research that is even more important than separating the fossil fuels from the biofuels, and it's the time factor. Because we have a soon to end carbon budget, we have to rapidly stop all the emissions of carbon to the atmosphere independently of where it comes from. We have to bend down the curve that describes the emissions of carbon quite quickly. And if we should not exceed the 1,5°C anthropogenic warming of the atmosphere, then we have to half the emissions by the year 2030.

If we clear-cut the Swedish forest now and plant saplings, then it will take until about the year 2100 before we get back the carbon that was released to the atmosphere during the clear-cutting, and it is absolutely too late. That is why the time factor is so important. It is the only thing we should discuss when we talk about climate and forestry. The time factor also means that if you use for example biofuel from agricultural areas, which has one year of carbon pay-back time, then you are within the time limit. So it depends on which kind of biofuel you use. The politicians are absolutely wrong when they talk about how we should use the forest instead of oil. Of course we also have to cut down the use of fossil fuels. Some say that if we don't use the forest for energy purposes then we have to use oil instead. Well, that is the same. Then we just continue to emit a lot of carbon. The right alternative is to use less energy. **We cannot continue to replace one kind of emissions with another kind of emissions. This is my main message.**

And the most serious thing about this is that we can come to what is called climatological tipping points, where nature starts to produce its own greenhouse impact. For example, if we melt the polar ice then the *albedo* effect – the reflection of solar radiation – will decrease, because we get more sea and dark areas that absorb heat and become warm, and then this warming of the atmosphere melts even more ice and then it goes by itself. Another way is that these enormous amounts of carbon in peat in the northern part of the world, for

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<sup>3</sup> Since Stig-Olof Holm held his presentation in 2021, the number has increased to about 100 million tonnes.



example in Siberia, start to go up, then it could also be a kind of a self-generating loop. So instead of having a greenhouse we can come into a situation which scientists call ‘hot house’.”

## Ecological overshoot

**“So what has to be done is that we have to cut down on the use of energy, the consumption, and we have to make it so that the rich people have to cut down more than ordinary people.** But it’s also wrong to compensate by paying for trees being planted in Africa and then continue to fly and pollute through fossil fuels emissions. We have to use all the trees we have left here and also replant to suck down the carbon that we have already put up in the atmosphere. Beside that, people in the rich world should not grab the land in poorer countries, which their own inhabitants need to grow food or energy crops for their own necessary energy supply.

**According to a report from UN climate panel (IPCC), to limit the risk for enlarged climate change, it will be necessary to decrease the use of energy by 40-70 percent until 2050.** There is a recent publication showing that we still can have a decent material living in rich countries, such as USA and Sweden, even if energy consumption is decreased by 80-90 percent, but that poor countries must be allowed to slightly increase their energy use.<sup>4</sup> The study shows that even if we would use more of wind power or water power and such technologies, the majority of the climate mitigation has to be done by cutting down the use of energy. In this is included that the human population of the world could increase to about 10 billion to the year of 2050. Today we are already more than 8 billion. That means more people which means an increased demand for energy. But other studies have shown that if women get more to say about family planning – empowering women –, then maybe the world population could stay around 8,7 billion in 2050.<sup>5</sup> Then we don’t have to decrease as much per person in the world.

What is left now of the planet’s carrying capacity? It’s not much left actually. Last year the weight of human products became larger than the weight of all living things on the planet. If we only look at the total weight of

<sup>4</sup> Milleward-Hopkins, J., ‘Providing decent living with minimum energy: A global scenario’, *Global Environmental Change*, Vol. 65, 2020.

<sup>5</sup> Lutz, K.C.S., ‘Demographic scenarios by age, sex and education corresponding to the SSP narratives’, *Population and Environment*, Vol. 35 (3), pp. 243-260, 2014.

mammals and birds in the world, then the wild species is about 5%. 95% is either humans or our domesticated animals. Actually 36 % of the weight of the animals and birds in the world is human weight. 59% is pigs and horses and chickens and so on, the rest 5% is the whales and the moose and all those. How much of the world's terrestrial photosynthesis are we using now - what is called 'net primary production', the growth of biomass from plants? How much is left to use? A lot of the plants are growing on mountains or wetlands and we can't use them and a lot of them are also the roots and we don't dig out all the roots from the trees - so it's a large proportion that we can't use. But of the plants that we can use, it's only 20% left. We have already used about 80%. About 70% of the left stock of phosphorous in the world, that is necessary as fertilizer in industrial agriculture, thus critical for present world food production, remain in Morocco and the Western Sahara; in maybe only about 60 to 70 years from now it may be gone.

And we have changed the planet's surface. About 6000 years ago forest covered about 6,2 billion hectares. Now it's about 3,8 billion hectares. We have almost halved the forest area. And the carbon in this forest is now in the atmosphere. So about 23% of the human caused climate impact is due to forestry and agriculture. Half of the land area is now converted to grass or agricultural areas. So it is not only the climate, although the main issue in the current discussion is the climate. But... it's like we are eating an apple and it's just the inner part left. That's the actual situation. This is something people have to know and learn about. Not only talk about the climate. And we have to have a kind of degrowth."

## **On the imperative of restoration instead of continued devastation**

So much to the impossibility of sustaining infinite economic growth and global ecological overshoot, as mirrored in the Swedish forest management. What could be an alternative way of relating to the forests of Sweden, Sápmi and the world that would not inevitably push us into a hot-house condition which in turn would wreak havoc on the forest in a vicious cycle of ecological breakdown? Clearly, as reindeer herder Henrik Andersson pointed out: "They have cut too much a long time ago already. Now it is time to restore." What does the ecologist say?

"In Sweden about 200 thousand hectares are yearly clear-cut. We say that they are in a condition of clear-cut area, or recently regenerated area, for about 10 years. If we count on that, we can say that approximately 2 million hectares are in a condition where we can directly get back a more natural situation by simple methods, instead of converting it into a plantation, which is done today - if they change the way of management. This is important because we also have to secure the regrowth of forest, otherwise the climate change will kill off these mono-cultures.

If you have a monoculture of one tree species instead for a forest and you get a warmer climate, then you will get more insect and fungi attacks, the risk for wildfires will increase, and so on. So to secure the future forests we have to change the way of regeneration of new forest. For example, it has already happened, *Gremmeniella* fungus attacked a lot of monocultures of pine in 2003 and 2004. Then the forest companies had to start up new plantations because the first ones were just destroyed by the fungi. The research shows that if you increase the amount of deciduous trees in those pine monocultures by not, as presently is done, thinning out most of the deciduous trees, then less pines will be infected with the *Gremmeniella* fungi.

We had a large hurricane, Gudrun, in 2005, which felled as much trees as one total [annual] logging in the entire Sweden. What we have seen afterwards is that if you compare protected areas, where a natural mix of tree species occur, with spruce plantations, it was just a small proportion of the trees that fell in mixed forests compared to the plantations. So if we get more and more windy conditions and more hurricanes and so on, then it's also important to have mixed forests. If we look at the risks of having wildfires, a satellite study of the global boreal forest has shown a 24 times larger risk for a total fire if you have a coniferous monoculture compared to deciduous trees.

The forest management in Sweden is absolutely foolish, I would say, and from an economical point of view it's also very strange. What I suggest we should do is that instead of converting the forest into pine and spruce monocultures, we should use all the already existing methods for more varied regeneration directly on the already clear-cut areas, towards ecological restoration into semi-natural mixed forests. It is very simple to re-establish varied forests of mixed tree species on present clear-cuts, but the big forestry companies in Sweden

continue to just put out either only pine or only spruce on the clear-cuts, converting former natural or semi-natural mixed forests into conifer monocultures, expanding their 'green deserts'.

We can say that this with mixed forest is not only to protect against risks due to climate change, but it has also an important direct positive impact on the climate. A European study has been made where they investigated the impact of human forestry since the year of 1750. What was found was that the largest climatological impact is due to that people historically have changed the composition of trees in Europe from deciduous trees to coniferous. This is because deciduous trees reflect more of the solar radiation, they have a larger *albedo*. While dark spruce absorbs more of the solar radiation so it becomes warmer above the canopies. Additionally, deciduous trees evaporate more moisture so it cools the atmosphere above. This change, from more of deciduous trees to conifer plantations, has actually had a larger impact on the climate in Europe than the impact from change of carbon cycle by forestry. If we take the entirety of Europe we have 10 percent larger forest cover, or tree cover, today compared to the year 1750. They had more agricultural area in Europe in 1750. But this 10 percent is former agricultural areas that have been planted by spruce. The net effect of this is actually that the planting of trees has heated up the climate.<sup>6</sup> Normally you think that if you plant trees then you will suck up more of the carbon dioxide, and then it will decrease the climate effect, but in doing so, they have changed the *albedo* value, because agricultural areas are lighter so they reflect more than if you had covered it with dark spruce plantations. This is also an important thing if you talk about using more deciduous trees that reflect much more of the solar radiation, which has a positive climate impact.

Then we have another publication which shows some variables which describes the productivity of trees, the production of bilberries and game, and lots of other ecosystem services. It shows that if you have more tree species, then you also have an increase of the ecological services. Not only in the timber production but also in some other very important things like the biodiversity of the field flora, and so on.<sup>7</sup> So we have many arguments for changing the kind of regeneration of already logged areas. And the still standing forest, I think, we should completely forbid clear-cutting, like in parts of Germany, also in Sweden. Maybe some selective logging of some larger trees but I'm not even sure about that either. I own forest, and after I read the IPCC report 2018 about the critical importance of the time factor, I have completely stopped to log my own forest commercially, because it's the best way to do it. And I hope that other private forest owners will do the same.

The ditching of forest in Sweden is causing about 6,5 million tons of carbon dioxide equivalents to the atmosphere every year. So it is not as much as the car traffic but almost as much. By stopping this we can immediately do something. And as I talked about before, the time factor is important. **If we stop much of the logging and dam the ditches, we can do something directly. Not only continue to discuss that something should be done about the climate. We can do something directly to stop the emissions and save some forest for the future.**"

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<sup>6</sup> Naudts, K., et al., 'Europe's forest management did not mitigate climate warming', *Science* 351, Issue 6273, pp. 597-600, 2016.

<sup>7</sup> Gamfeldt L. et al., 'Higher levels of multiple ecosystem services are found in forests with more tree species', *Nature Communications*, 4, 2013.

## ‘The Economy’

Even if other small land owners were to follow Holm’s example, the main problem, so we are told by several reindeer herders, lies with the large corporations and State-owned Sveaskog rather than with small private owners. Sveaskog’s formal consultation with the reindeer herders – to create the illusion of abiding to the FSC principle of free, prior and informed consent from the indigenous population – pertains only to where, not if, to fell. Furthermore, Sveaskog demands secrecy about the consultation. When asked why they don’t boycott the consultations with Sveaskog altogether, our (anonymous) reindeer herding informants answered that then Sveaskog would go directly over the corrupt government agency Skogsstyrelsen. In the case of the outspoken reindeer herder Henrik Andersson’s dealings with the mega corporation SCA, they decided to ban him from their offices. This industry is detrimental to reindeer herding, it is detrimental to biodiversity, it is detrimental to the global climate. It could easily be changed. Who benefits from this rapacious industry?

“We have a big economy in Sweden from export of mainly paper to other countries. It’s a present net export income of about 100 billion SEK [10 billion Euro] a year, but the majority of this goes directly into the capitalists’ pockets. Many people in Sweden believe that this clear-cutting gives a large income to the State, but this is not correct. It’s only about 2-3 percent of the Swedish State tax that comes from the forestry sector. It’s the stockholders in Sweden and other countries that get much of the gain. It is them who earn the money. That the tax on electricity use in the environmentally damaging paper industry today is subsidized with 6-7 billion SEK per year, and pays a fraction of the tax on electricity that ordinary Swedish people are paying, is really quite scandalous.

If we look at other important variables in this, it’s the degree of employment. It’s the same there, that it’s only about 2 percent of the Swedish working people that are employed in the forest sector. In total in the forest industry it’s about 70 000 people, but if you also include all the others, for example the people that work in a store where they have a saw mill, it’s altogether 120 000 people. But it’s about 5 million people employed in Sweden. Then you can count: we have about 1,5-2 percent. If we look at those who actually work in the forest, in the big machines or so, it’s about 16 000 people. Which means that it’s about the same amount of people that are employed by the municipality in a Swedish city. Almost nobody continues to work because those machines are so efficient. Almost no people need to work in the forest. If we look at the variable gross domestic product, it’s about 2,5 percent of the Swedish GDP that comes from the forest sector.

Sweden’s forestry industry is a little part of the total system. Of course we also have to change the world trading. Because the trading and the capitalists that sucks out the resources of the world not only affects the climate but all resources in the world. This has to be completely changed into another system. For example instead of logging trees - so we can keep this, so to say, ‘vacuum cleaner’ that sucks up the carbon from the atmosphere - we can use rest products from agriculture to make paper, which has been done before. This, because we need some paper also in the coming years. But if we change the systems for trading and completely change the political situation, then it could be done. So there is a lot to do, but we have to do it in the same time on different levels. Change policies, have these kinds of actions that you are doing, and all the protests from indigenous peoples, and so on. It all has to be done on different levels at the same time.

As I see it, the most efficient measure to change the situation in north Swedish forests would be by massive international boycotting of Swedish produced paper, by the consumers of paper, hygiene articles, packing material, etc., in for example Germany, Great Britain, the Netherlands, and so on. The goal with such a boycott should be to make the larger Swedish forestry companies like SCA and Holmen go bankrupt.”





# SÁPMI IN THE MODERN WORLD-SYSTEM

*“Every civilisation has had its irrational but reassuring myth. Previous civilisations have used their culture to sing about it and tell stories about it. Ours has used its mathematics to prove it.”*

- David Fleming, historian and economist

“Is it reasonable to destroy the environment to protect the climate?” professor Helsdotter asks us. What is the point of ‘protecting the climate’ anyway? Was the point of it not, once upon a time – before so much of bourgeois society’s free floating anxiety and bad conscience was attached to the phenomenon of climate change to then be channeled to blind faith in deliverance through the old idol of technological Progress – to prevent the destruction of the environment? How – or: what for – did the two get divorced to the point of being perceived as a dilemma, as if either one has to be sacrificed for the sake of saving the other? How did corporate interests manage to sell environmental destruction as a means to protecting the (climatically determined) environment?

That problems are being created by the waxing wave of green colonialism, whether in Sápmi or elsewhere, is evident. But which problems are being solved by it? Are global greenhouse gas emissions decreasing? Are they going to decrease by clear-cutting forests for bio fuels and wind parks, by building new roads and railroads, by opening carbon-intense open-cast mines? What exactly is environmentally friendly about opening more mines, cutting more forest, pumping more greenhouse gases into the atmosphere for the sake of producing more steel?

In this section we descend from the high north into the deep south of Sweden to talk to two scholars of human ecology. The first one is Andreas Roos, who recently completed a PhD on renewable energy technologies at Lund University. The second one is his senior colleague Alf Hornborg, who has spent decades trying to unravel our tightly-knitted cultural and ideological assumptions that obscure a more honest look on matters of economy, ecology, technology and power. If so far the focus has been on Sápmi, in what follows it will be divided between Sápmi and more general question prompted by our engagement with the issues of colonialism and ecocide in Sápmi. The reason for that is that this booklet is meant to stimulate reflection among readers in the south, first by looking at Sápmi, then by looking inward.



# **“We need to address the root issue, which is the aggregate, overall material-energy throughput”**

Conversation with a human ecologist on the promises of renewable energy technologies

*“There is nothing ‘green’ about Europe’s so-called green energy transition. Green energy transition is only as ‘green’ as the money financing it, or the techno-scientific and public relations apparatus designed to celebrate it.”*

- Alexander Dunlap, anthropologist

Central to the Green Transition narrative used to legitimize all kinds of exploitations in Sápmi – and of course elsewhere in the world – is a solid belief in the promises of renewable energy technologies. In the summer of 2021, Andreas Roos presented his doctoral study titled ‘Renewing power: Including global asymmetries within the system boundaries of solar photovoltaic technology’ at Lund University, in which he looks into renewable energy technologies generally and solar photovoltaic specifically. He questions the promises around the sustainability of these technologies as a genuine alternative to the fossil fuel based energy regime that we have nowadays:

“The installation of renewable energy technologies is not strictly speaking replacing fossil technologies. Since the consumption of fossil energy carriers is increasing, installing more renewable energy technologies amounts to an energy addition, rather than an energy transition.”

We talked to him about the attempt to technologically fix the global environmental crisis, the so-called Green Transition, so-called renewable energies, machine fetishism and (inevitably?) about civilizational collapse. In an interview with Derrick Jensen on Resistance Radio, Andreas expressed his verdict as follows: “When we turn to renewables to sustain the industrial way of living, we are essentially not renewing energy but we are renewing the domination of the natural world and the social power structure that has shaped the world economy at least since the 16th century. It is not something new; it is a continuation of industrial capitalism that has wreaked havoc on the planet for way too long.” In this conversation we explore the thinking underlying that statement.

*As you know, the geographical focus of our project lies on Sápmi, more specifically the part of Sápmi within Swedish territory. Have you ever been there yourself?*

Yes, I have, but not very much. I was there a few summers ago, in Jokkmokk [Jåhkåmåhkke]. I don't know many Sámi myself, but Sápmi has a long relation with the Swedish State and the Swedish Church as well, relations that are very central for Swedish history.

*You are Swedish yourself, based in the south of Sweden where you have been working at Lund university. Sweden is a progressive country, both in the sense of embracing 'social progress' – in the Nordic sense of combining capitalism with welfare statism – as well as in the sense of embracing 'technological progress'. While other parts of the world are suffering from climate change, getting flooded or ravaged by resource wars, Enlightenment optimism seems to be alive and kicking in the much-celebrated Nordic countries. A technological fix is available for each and every problem, every industry is Green. The technological Green Transition will change the face of the earth. Is that a fair impression?*

I think that's an interesting question, especially directed at someone like me who is from Sweden. I notice that when I socialize in international contexts I learn the most about Sweden and the quirks of the culture. Anthropologists distinguish between an emic and an etic perspective - an inside and an outside perspective. Just the mere fact that you raise the question makes me reflect upon it. I haven't necessarily seen the same things. My general impression is that Swedes are more inclined to trust the authorities compared to people in other countries, judging by the relatively low levels of corruption. That's the angle I could see on your statements carrying some truth value: Swedes have a tendency to trust the hegemonic narrative because the government is less corrupt than in many other countries. So there might be truth in that Swedes buy into the technological promises but, then, it's also reflected in party politics: there is no technology critique and no growth critique either. So my impression is that for instance in France - you might have to correct me if I am wrong - there would be more perspectives that are critical towards the growth agenda. There is nothing like that in Sweden. I suppose the conversation has been more on social questions rather than deep ecological questions. By which I mean: what is the actual purpose of society if you take into consideration environmental questions? That is a

question that is not addressed in politics at all. There is an anthropologist called Cindy Isenhour who has looked into Swedish consumer mindsets. She would be able to answer this question much better than I would. She raises the point that there is little critique of where things come from among the general population.

*To be sure, green-washing is everywhere. It is not limited to Sweden only. It can be understood as an indication of at least two conditions being fulfilled. Namely: a recognition that something isn't quite right (a minimal ecological awareness) and secondly a willingness to be fooled. Why do people who are not actually stupid decide to go along with the deception, or self-deception, of green-washing?*

Let me come back to the previous question first. There is this narrative of Sweden being a role model of environmental sustainability for the rest of the world. Recently, in a debate on solar panels I tried to step in with an article. One of the arguments [I wanted to respond to] was that Sweden needs to embrace and take responsibility for its role as role model for the rest of the world. It's a very high-flying idea that we will lead the rest of the world, almost like hegemonic US culture but in terms of sustainability. Like: 'we have the right to model environmental sustainability'. There's some kind of national pride in that, I think, that could distort people's view and also make them feel more inclined - and this relates to the next question - to accept the deception.

But I think there are more aspects to it. The massive increase in production and consumption of goods, the massive development of technology, the massive increase of energy use is called the Great Acceleration. Essentially, since the 1950's onward, almost all social, economic, biological and earth science indicators - CO2 in the atmosphere is a classic example, but also rate of extinction,... - go straight up. This Great Acceleration has not only brought ecological and biological devastation as we're starting to realize, but it's also brought, you might say, increasing material wealth and technological development. This has not only made people more materially well off but also changed the way in which we think about what wealth is and where it comes from.

This Great Acceleration is very closely linked to oil, a very dense source of energy. At least in the beginning of the 1900's with relatively little effort you could dig down into the earth and get a massive amount of energy back. So in terms of an energy strategy

oil has really created an unprecedented historical situation where with very little effort we can get a lot of energy. When you have a lot of energy, you can produce a lot of stuff. And then we see the cost of it, but we don't connect the development that has occurred during the twentieth century, this massive technological and economic development to these energy sources in that way. So we still live with what you might call the Fossil Imaginary. Our cultural ways of seeing things are informed by fossil fuels, or a world that has been built by fossil fuels. I think that is a point that many might overlook. With this imaginary based on fossil fuels comes the idea of the good life, the good society and what you're supposed to have as a consumer, what society is supposed to be about - GDP, for example.

*So there is a sense of normality that has been shaped by oil. But even as the availability of oil is decreasing and people are becoming more aware of the detrimental consequences of oil combustion, this standard of normality is not being adapted accordingly. So we have to recognize that the use of oil has created this historical anomaly and that our normality is not normal?*

Exactly. We probably see people ascribing the lower energy efficiency of the whole world economy to other things like, you know: it's someone else's fault that society is going to shit. 'It's the immigrants' - that's the nationalists' view. But they don't have this ecological view of what's going on and how **in the past civilizations have risen and fallen in relation to energy sources. So I think that's where we as environmentalists could have an additional point to add to the political sphere, from this understanding of energy and our need as biological creatures of some kind of relation to the natural world.**

*That brings us to the question of carriers of energy. This has been the subject of your thesis. Quite recently the EU has been persuaded to recognize fossil gas and nuclear power as sustainable energy sources, to incentivize state and corporate investment. They see this as some kind of transition phase towards proper sustainability, whatever that may mean. This decision has been criticized quite widely. The reputation of gas, an obvious fossil fuel, and nuclear power, has been damaged in recent years, at least to some extent. What is less widely criticized is the combustion of bio-fuels, which as it is done on a massive scale in Sweden and Sápmi requires huge forest clear-cuts. It is actually recognized as a renewable and therefore sustainable energy source, even climate neutral, by the EU. This*

*receives less attention than fossil fuels, but perhaps even less scrutinized by environmentally concerned people, and that brings us to your thesis, are the negative effects associated with the whole spectrum of renewable energy technologies. They are hailed as proper alternatives to fossil fuels, considered carbon neutral and therefore sustainable, including by the likes of Leftists, environmentalists, climate justice activists,... In your thesis you try to debunk certain myths that have been constructed around these technologies. Are you claiming that people who care about climate justice should seriously reconsider their attitude toward renewable energy?*

Yes, at least renewable energy technologies. I know what you mean, but: as physical organisms and societies made up of those, we need energy to survive. That's the bottom line. And the best sources are of course renewable sources for that. So in that sense I am not against renewable energy. What is problematic, I think, is the large scale development of advanced technological systems that require massive amounts of materials and labour and land surface to sustain a society based on ecological overshoot, a society that is already consuming - well, energy can't actually be consumed, it can only be transformed - that is already transforming more energy and using more material than the land base can actually regenerate. And that is thanks to fossil fuels. It's because our energy sources don't actually come from the immediate surfaces and ecosystems of the world but they come from past ecosystems that have been compressed in the crust of the earth for millions of years. To think that we can consume the same amount of energy, effectively these compressed ecosystems of the past, is the thing that is unfeasible if you think of the massive amount of energy that is currently going through the world economy.

*This sounds like a general critique of the fossil system - that within a few generations we are squandering this prehistoric solar power encapsulated in the crust of the earth and then it's over - but as I understand it the promise of these renewable technologies is precisely that they can transcend this dependency on prehistoric solar energy. However, in your thesis you point at certain contradictions involved in these technologies. Could you lift out the most important of these contradictions?*

One is the issue of land. The whole idea is that we can replace fossil fuels with renewables. But we need to look at what fossil fuels are to understand whether it is feasible or not to turn to these renewable energy technologies. One of the central issues is: how much surface area would be needed to capture

the same amount of energy if we imagine a transition from fossil fuels to renewables? One simple thought experiment that you can do is taken from a journalist called Therese Uddenfeld. If you put out your hand in the sunshine, you will feel how much heat and energy can be captured on the surface of your hand. If you with your other hand hold a lump of coal that is burning, you realize the difference in terms of heat and energy content between these energy sources per surface area. So if we want to transition away from fossil energies, which are highly dense sources of energy, to renewables, there is the issue of how much surface area would be needed to substitute for this lump of coal.

That is what some of the research is showing: to sustain high energy modernity, we would need incredibly large surface areas to cover this. We are not talking only about rooftops, we are talking of the size of Scania covered in solar panels to sustain maybe not even the whole energy consumption of Sweden. This obviously - well, probably, I'll say it like that since from a scientific point of view we don't know for sure, I suppose - this would likely have a very high impact on people and ecosystems in these places. Whose land will this be put on? Who will bear the costs of this? And I am not only talking about humans, also other animals. There have been cases with solar in particular where people have been driven from the land to make way for these mega power plants that would transfer energy into the large metropolitan areas where they can actually afford to buy this energy. Usually vulnerable people who don't have much social or political power are essentially pushed aside.<sup>1</sup>

Many people's idea of renewable energy technologies is that they are more just. Take Naomi Klein for instance. In her book 'This Changes Everything' she - and this is related to German thinkers as well, Schaeer among others - has this idea that if communities can put solar panels on their roofs and in their backyards, then they can capture energy that they themselves can use, thus liberating them from corporations that own the electricity grids, that own the infrastructure that creates the mandates, the condition for energy provision in a country. Germany went pretty far with this, even created some energy cooperatives that even managed to obtain some political power. They could say: 'we are a co-op that has organized itself and if the politics of this society doesn't go in the direction

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<sup>1</sup> One (in)famous example would be the Noor Ouarzazate mega-plant on land stolen from the local Amazigh population on Moroccan territory, financed with loans from the World Bank, the African Development Bank, the European Investment Bank and German capital.

we desire, we can decide to shut down the energy production and not send it out to the grid', thereby putting pressure on politicians to make more just and ecologically sustainable decisions. But what is often overlooked is that this very idea of increased justice, increased sustainability and political power excludes the fact that these panels are actually produced. This is the great mystery for me.

What I try to show in my thesis is that all these political ideas about renewable energy technologies and how they are supposed to transform society have completely overlooked the fact that these panels are implying the extraction of minerals, big factories - if we are talking about the scale that they are hoping to accomplish - which involves labour - we have reports from last year from the Chinese Xinjiang province and the Uighurs who are producing solar panels among other things. I think this should not be taken as a coincidence if we consider that prices for solar panels have dramatically dropped since they were starting to be produced in China in the beginning of the 2000's. This is not a coincidence, even if the decreased prices are often attributed to increased scientific knowledge of how to produce them. That is the contradiction: that other people on the other side of the planet - Vietnam, Malaysia, China - are producing these panels where there are also less environmental regulations, not the least in the use of coal which is used in these factories, which all contributes to a lower price but also to increased impacts on the social living situations and the environment. So there is an injustice on the global scale that is being overlooked just by the fact that we don't consider that these panels are actually being produced.

*So what is going on there is that Uighur people are put into work camps to produce solar panels, then those solar panels are exported to Germany, put onto roof tops and then people in Germany believe that they are actually producing energy in putting those solar panels on their roofs. In your thesis you have tried to understand this phenomenon in terms of the fetishization of technology - that it is the technology that is producing rather than, in this case, the enslaved Uighur people. Can you explain what you mean by the concept of technology fetishism?*

That is a very interesting question that can go quite deep. Where shall I start? There is a history to the very notion of fetishism, which I think is not very known. I am certainly no expert in the history of it but I would first of all like to clarify that it is not the Freudian notion of fetishism which has to do with sexuality and actually came later. The original

sense of the term was from Portuguese traders who encountered people in Africa and saw what they believed to be some sort of superstitious thinking in the way they interacted with objects. They used a derogatory word, *feitiço*, which essentially translates to 'abracadabra' or something like that in English. So they were kind of looking down on these people as being naively superstitious.

Then this term was picked up later. I am not sure whether some anthropologist picked it up prior to Marx but Marx turned it on its head in terms of what he pointed it at: the modern industrial human. He said that actually we are not so different in how we ascribe agency or mysterious qualities to things. His term was commodity fetishism. He made the point that when a commodity - say a solar panel - is produced by someone somewhere, as soon as it enters the sphere of exchange, as soon as it is traded, it somehow takes on a life of its own because it got separated from the context in which it was produced. By buying and trading things we don't actually see that they come from labour - a kind of hidden but essential aspect of the commodity. Then Freud picked up on the term and did whatever he did to it, which became a completely different concept. Then there was some more anthropological stuff written on it and then Alf Hornborg picked up the term and applied it to machines. His point was essentially that even Marx who thought of commodities as fetishes, fetishized the machine.

The formal definition of fetishism is to ascribe agency to objects. But the way I like to see it (which is more related to the term reification), is: to omit the past of a commodity or a technology, and only to think that it exists here and now. When we say: solar panels will contribute to a more sustainable society, then the solar panel is usually just thought of as existing in the present. By including the past we get a very different view of what technology is and what it does. This is essentially to unfetishize it. If we look at it that way, technology is not something that grants us access to time or to services, it is a way of transferring these services and time, or land, from other people to the people who can use it. **So the very function of technology is to transfer time and space. Fetishizing technology is what we do when we don't include the past of the technology and just think of it as simply emerging in the present out of nowhere and mysteriously giving us access to time.** You might claim that this is to ascribe agency to it.

*Yet I suppose that many people would claim that there is actually a qualitative difference between*

*fossil fuels, that are obviously also being harvested, involving exploited labour and severe environmental damage, and the production of a solar panel which may equally involve exploited labour and ecologically harmful effects but once the panel is there, it is qualitatively different in the sense that it can then harvest solar energy and become to a certain extent autonomous, which is not the case with fossil fuels that are combusted and then gone forever.*

Essentially, yes, there is a qualitative difference. I think we have to acknowledge that solar panels do emit in their usage phase and generally throughout their life cycle less CO<sub>2</sub> than fossil fuels. But we should also recognize that solar panels have a life span of twenty to thirty-five years. It is not so much that the sun rays are captured but they agitate the materials in a way that generates electricity. This ability of the material is degrading over time. In that sense solar panels are also used up.

The overall point I am trying to make in the thesis is that there is no such energy technology or energy strategy that doesn't have an impact on the natural world. This is something that we really need to start realizing: the fact that we are actually part of nature means that we need to draw upon resources and energy from nature to sustain within it. That means it is inevitable to have what we would call an impact on the earth - whether that's through fossil fuels or renewables, it is equally true. This problem of climate change will simply be transformed in shape. It will not go away. Yes, we might curb the CO<sub>2</sub> curve, but at the same time we would generate new problems in the earth system that are related to material extraction and land use. Which is also problematic in terms of fossil fuels, but they will likely be exacerbated with the transition to large scale renewable energy technologies.

We need to address the root issue, which is the aggregate, overall material-energy throughput that has massively increased over the last two hundred years, since the access to fossil fuels. And with that, as well, a wider question: what do we hope to accomplish as a society? In politics this is just not addressed. This kind of baffles me. There is some kind of blind spot at least in western industrial society: why do we actually have a society at all, where are we headed, and why? There is this almost implicit idea that is most widespread, I think: this Elon Musk and Jeff Besos idea that we should become a space traveling species, that this is the biological imperative. We see it in science fiction, we see it a lot in mainstream culture.

But I think that if we really want to address the energy problem, we need to understand our species as part of nature. It is so cliché but so central. I don't mean it in the New Age sense but very materially. I almost feel alienated from my friends when I say that we need to look at our involvement in nature from a material view. Usually it's the connectedness to nature in how I feel connected to nature, and this is very valid and I think it is very possible to combine it with a material view, but we seriously need to look at the material aspects. That was a long answer, I guess.

*Well, you open your thesis with an ancient poem by Lucretius called 'De Rerum Natura', the poetic rendition of Epicurean philosophy that holds that nothing comes from nothing. This is about two millennia old. Have we forgotten some basic wisdom in our accumulation of knowledge?*

I don't know how widespread Epicurus' thoughts were in Antiquity but there is definitely a strand of thinking from a material point of view of nature which has existed but not been very prominent. A materialist view of nature started with geology in [modern] Western society. They were studying rocks, looking at the shapes and forms of rocks, mountains and the Earth's crust. They started to think that these rocks have these qualities, consist of these materials, because they have somehow been evolved in a geological history that makes them look like this. The idea that there was a natural history that had made the rocks take on the material form they had was revolutionary because before that it was thought that God just created them that way. Then started the nineteenth century materialist turn, which happened to coincide with fossil fuels, which is extremely interesting.

What I claim in my thesis is that technology never really went through this shift, that the way we perceive technology still has some of these, as Marx called them, "theological niceties". We don't look at the history of how they're shaped, similar to how geologists in the beginning of the nineteenth century didn't look at the history of rock formation. This can also be explained by the fact that it is not essential in everyday life, to be going around thinking 'by using this phone to call someone I am using somebody else's time'. But now I am going on a tangent here.

*Let us come back to renewable energy technologies and try to dig deeper into that matter. You described the situation in which solar panels are produced in the Chinese empire by people who are very poorly paid, perhaps working in forced labour camps, enabling Europeans - be it Germans, Swedes or*

*whoever else - to install these panels rather cheaply. Is this exploitation inherent to in this case solar photovoltaic technology? Is it a necessary condition or a contextual one, just the way it happens to be within the globalized capitalist market?*

That is one of the central questions of my thesis. There is the idea that through different ways of producing we could escape this problem of inequalities. In my thesis I provide an argument contrary to that, saying that it is likely inherently political because it requires a net importation of resources from elsewhere in order to be physically viable for maintaining the material standard of modern industrial societies. **If I want to have a society run 100% on solar panels, I would actually need larger surface areas than my country even has access to.** Photovoltaic modules can arguably be produced and installed for the purpose of not maintaining the material standard of modern industrial societies, e.g. in communities organized in democratic confederations. But then we need to take into account how the international system of material exploration, extraction, processing and trade requires increasing amounts of available energy every year in order to dig deeper for finite materials, transport the materials across larger distances, and recycle an increasing amount of these materials (due to the fourth law of thermodynamics implying that any material processing/transformation implies a loss, however minimum, of usable materials).

Since the solar photovoltaic energy harnessed in local communities will not likely be fueling the world economic process of mineral exploitation, the very foundation upon which solar photovoltaic infrastructure is based will not be supported if solar photovoltaic technology is installed in and for local communities. Considering this, it is likely that the technology requires, inherently, a global system of exploitation which transfers the necessary resources from one group to another. Without it, the technology would likely cease to exist. The larger question is whether solar photovoltaic technology not only requires such a system of exploitation, but whether we can say that it *is* such a system of exploitation, because it cannot, seemingly, be separated from it.

*Let us now try to apply what you have been saying on the context of Sápmi and Sweden. In your thesis you have been focusing on solar technology, which is not used on a large scale in the north of Scandinavia. What we do see are other technologies that require very large surfaces like wind parks with up to a thousand or more turbines on clear-cut surfaces that used to be old growth forest reindeer herding*



grounds. Would you argue that in similar ways the industrial progress of Sweden, or the covering of Swedish energy demands, is only possible if its cost is externalized, for example by building this huge Green infrastructure on colonized land in Sápmi? We talked earlier about the notion of Sweden being a formidable example of social and environmental virtue. So let us look deeper into what these supposedly virtuous policies actually require in the real world.

There is a lot to say about that. The first thing I am thinking about is that it is possible to see a connection between these windmills and the iron mine.

Windmills don't come from nowhere - they no doubt require steel for their construction.<sup>2</sup> Energy expert Vaclav Smil wrote a great book called 'Still the Iron Age' which shows that essentially all industrial infrastructure is contingent in one way or another upon iron and steel. This goes for solar panels, water power, geothermal power plants, bio-gas refineries, Tesla cars, whatever Green tech you can imagine.

When I talked before about calculating the footprints of solar photovoltaic technologies, I included mines and adjacent areas affected by the mines. **So in a way the Sámi, just by having both the issue of wind and water power based on their land to supply energy for other people, but also extractive zones being established, are dually affected by this energy strategy and Green tech.** That brings us to the question: can we instead place those mines elsewhere? That is of course possible. They tried to extract other materials in Scania, for instance, and there were protests against that. But anywhere you put it, there will be effects.

The Sámi have been historically exploited and are numerically disadvantaged, that is the reason why the mines are being placed where they are placed, among other reasons, another one being that there is iron ore there, and the economic reason that land is cheap there. When we talk about inherent issues of extractivism in Sápmi, that's something to look at. But that is of course within the confines of the capitalist system. The question is also: would another social system be in less need of these materials? I don't think so. I think these issues are inherent to these industrial technologies.

*That prompts another question. If fossil fuel capital is necessarily ecocidal and colonial, but also renewable*

<sup>2</sup> According to the World Economic Forum and Visual Capitalist, "The average wind turbine is made of 80% steel on average (140 metric tons)." (Source: <https://www.weforum.org/agenda/2021/06/global-steel-production/>)

*energy technologies have an inherent colonial character and, as you demonstrate in your thesis, might not even help to overcome the climate crisis and cause all kinds of other environmental issues, what would a post-fossil fuel energy regime look like that is neither colonial nor ecocidal, if such a thing is possible at all?*

Yes, I think it is possible, by the mere fact that such societies have existed in the past. I think we have a lot to learn from the way people have been living and capturing energy in the past. The immediate alternative as a society - not only as individuals and consumers, as they call us, but as a society - is to really attempt to reduce our energy use and look at how we can do this in a sustainable and controlled way. What much of the literature on fossil fuels is saying is that this decline in access to energy is already happening and it will happen even more. The question is: do we want to control this decline in energy use or do we want a reactive response to it?

**Because of global relations of power it is possible for societies to uphold massive amounts of energy use at the cost of other peoples and the Earth. But fewer and fewer people will be able to access the imperial mode of living - by historical standards, an extremely high material standard - because it will become increasingly costly to exploit other people due to the finite character of resources on Earth.** I believe there might come a point at which the exploitative relations of capitalism become too obvious for most people, probably as the majority in Western countries starts to experience the injustices themselves. At that point the social-political response might be large enough to challenge the remaining global elite. I believe the elite knows this, as they are reportedly already working on an escape plan - luxury emergency bunkers and all kind of tech fantasy escapes.

So, the first step would be: we need a strategy to reduce energy use, there is no question about that. Then the question is: if these industrial technologies are inherently unsustainable and we want a sustainable relation with each other and to the Earth, then I think it is time to look into non-industrial energy strategies. In the past, there have been a few - I am just listing, not saying we should immediately pursue them, maybe we should -: hunting-gathering, pastoralism, horticulturalism, agriculture, small scale farming, permaculture systems. The interesting thing is that these are actually energy systems.

Especially agriculture might be interesting to look at, I think it. Up until the twentieth century it was an

energy system. La Via Campesina, the international peasant organization, made the claim that while industrial agriculture has a net expenditure of energy, small scale farming and peasant ways of organizing actually have a positive net energy effect. That means that when we produce food within an industrial system, we actually use a lot of resources to go into that system - the fertilizer, the machinery, the pesticides,... All the inputs require a huge amount of energy but you also produce a lot of food. But as a strategy overall it doesn't capture any energy: even if the plants do photosynthesis and store energy, that system actually uses more energy than it captures.<sup>3</sup> It is different in a small scale agricultural system that doesn't have the input of the nitrogen fertilizer and the high energy expenditure resources. Other studies, notably on farms growing corn ethanol, have shown that more energy is dissipated in the production (farming, processing, etc.) of the ethanol than is made available by burning the ethanol in combustion engines. So there are reasons to look at small scale agriculture as energy strategies.

I think this is the challenge: to actually sustain from local environments as opposed to fossilized environments from the past and the environments of other people at the other side of the globe. Maybe in an initial phase you can put solar panels on your roof but try to reduce the overall expenditures and try to look at more organic systems for your sustenance. So two things. First: degrow. Second: look at organic systems as energy strategies.

*I suppose the next question would be one of implementation. These systems have existed in the past, they still exist to a certain extent today. For example in Sápmi people have historically been quite effective at organizing their economy within the local ecology, adapting to the conditions that were there, having a localized or regionalized metabolism. What we see there is that this has been and continues to be forcefully disrupted, as it is everywhere else in the world. So this poses questions about how we not*

<sup>3</sup> To clarify: the industrial agricultural regime is inefficient in terms of its energetic balance, not because it requires more direct human labour input but because it requires the wasteful input of energy resources, in particular the unrenewable solar energy encapsulated in fossil fuels, the input of so-called ghost acres. Even if the human labour time input has apparently been dramatically reduced by the agricultural Green Revolution through automation, the overall energy input has not and is predicated on finite energy sources that contribute to global warming and on the input of invisibilized energy (fossil fuels as well as human labour) that has gone into producing the machinery and extracting the resources for the machinery.

*only theorize about alternatives but also think about preserving what is still there – or rather: allowing what is still there to preserve itself.*

*And look at reality: as you also demonstrate in your thesis, people have been thinking about peak oil and so on for quite a long time now but the consumption of oil, as well as of coal, has been increasing ever since, despite warnings that have been uttered for example by the Club of Rome already half a century ago. In your thesis you also refer to the economist Nicholas Georgescu-Roegen, one of the founders of ecological economics. He believed that the inexorable overshoot generated by a combination of population expansion and technological progress is rooted in humankind's biological nature and is therefore a necessary condition that will result in some kind of entropic orgy in which humankind brings about its own downfall. The collapse of the world economy due to its own inevitable overstretch will leave a humanity behind that has become utterly dependent on exosomatic organs – technology – in a world depleted of resources to maintain those exosomatic organs, that technology.*

*This is of course a highly pessimistic view but I wonder to what extent we can deny the tendencies that are actually empirically visible: that this is what we are doing. I would challenge the notion that it is rooted in human nature as such - there are many examples of past and present human cultures that have been behaving very differently metabolically and these differences cannot be reduced to stages in linear technological development but have a social as well as an ontological dimension - but on the other hand it does seem to be the direction that we are headed because of the hegemony of this specific culture.*

*From that observation onward, I think it makes sense to look at different regions in the world, and from a European perspective perhaps to not look too far and look at places like Sápmi, where this utter dependence on the technosphere, although increasing, has not been pushed quite as far as elsewhere and where there is some kind of ecological landscape left that could allow for reinhabitation of a local economy, local ecology. Is that something you would like to comment on? Georgescu-Roegen is quoted quite often in Degrowth writing but nobody actually seems to reproduce his absolutely dismal prognosis.*

*Yes, he was so central for looking at the economic process as actually part of nature. In a way it's such a ridiculously simple conclusion, the idea that we*

need some form of metabolic relation with nature. He came from a neoclassical background and saw this massive flaw: we actually need some sort of input to create wealth. But like you say the broader conclusion of his work is not reproduced in today's Degrowth literature. I think it's because they try to keep it positive so that it appeals to more people. I also thoroughly and deeply believe in a society with less material throughput in which we can sustain social well-being.

What I have found useful is to think historically about downfall and doom. Because I suppose people in Italy in the Roman Empire were not in a very dissimilar situation from where we are now, when the empire was split up and people saw the crumbling of their civilization. Joseph Tainter has this great book called 'The Collapse of Complex Societies'. I think he lists 23 different civilizations apart from the one we exist in now. One common aspect of them is that all have collapsed, all of them have lost complexity, as he formulates it. And all of them have gone through phases of massive frenzy and growth, some more so than other, but all of them crumbled in the end. He shows that all of this happens, this up and down, this rise and fall of civilizations, related to energy strategies and the social relations within those civilizations. The Roman Empire for instance was very contingent on farming land. There comes a point at which that energy strategy takes more energy than it can bring into the bureaucratic centres to uphold the military and everything that is essential for that civilization to operate in an effective way.

**I think that in terms of entropic doom, this is the way to think about it: the coming to an end of this energy strategy that has been going on for a few hundred years now in terms of the social relations involved in it. We don't know what the future holds but it could be that this 'renewable' thrust is part of this civilization trying to maintain its high energy input by any kind of means it can. From its point of view, if you will, this super-organism, as some ecological economists called it, sacrificing a lot of land to sustain the machinery might not be such a big trade-off, but it's going down still.** The little that we can preserve in this descent of this civilization, if that's indeed what is going on, is a valid effort and a valid struggle. That applies to protecting environments, protecting species, but also protecting people and offering seeds of something different that can arise from the ashes later.

It might be very idealistic and has problematic social aspects but I like to bring it up sometimes anyway: when Rome fell much knowledge and ways of

farming were preserved in monasteries by monks. They almost had an 'organic library', were trying to create something that would be sustained even with the fall of that civilization. I am not saying we should be monks, but we could see environmentalism as the practical application of alternatives of what can come next while, of course, protecting as much as possible. Considering the few numbers of what I would consider actual environmentalists, I don't know how realistic that vision is, but it is part of what I consider my job: try to raise awareness of what's likely coming and ways that we can deal with it that also appeal to people.

*Perhaps that indeed requires the debunking some of the myths that are being inculcated. There is all of this terminology - ecological, Green, sustainable, climate friendly,... - a whole host of increasingly meaningless words within the same semantic field thrown at us by politics, media, marketing, all of them trying to sell us lies or commodities, or both, but of course they are also trying to capitalize on a certain anxiety that exists among people. Slavoj Žižek has called ecology the new opium for the people, in the sense that this anxiety can be channeled and used to manipulate people. Some might argue that yourself and other thinkers debunking the myths around the salvation of technological innovations are taking away their opium that they are trying to hold on to in times that are very much tainted by the pains of disorientation and hopelessness.*

Yes. I think that is certainly true. I think it is very threatening to challenge someone's world view, what is going on and how much in control we as a society are and what we can do about it. What I found an extremely interesting finding when I did some interviews at a solar park was that many people who work there - one participant in particular - know that these solar panels were produced in China. He knew under what conditions they were produced. But he still worked at this solar farm putting them up. Not only that, he was also educating youths, he was working with these things as a feasible energy alternative to fossil fuels. Later, when I looked at the interview, I think I had an afternoon walking around thinking: 'He knew! They know this!' **It's not that people don't know about the detrimental effects of renewables, they cannot face, or they don't want to face - it's too challenging to their ideology, to their world view - that technology is not the solution.** Because so much hope is being channeled into this narrative it's very psychologically taxing to look at it and if you don't have the psychological resources - in the sense of stability in your life - to look at it, you will probably not do it. That is one psychological

aspect of it. And then of course it's not very much in the forefront of political debate either, this idea of alternatives to technology and the detrimental effects of technology. So that, I think, also makes it easier to not look at it.

*Is there anything else you would like to add to the aforementioned topics, or anything else at all?*

There is more to say about hope. There is a distinction between active and passive hope. We shouldn't hope for something just to happen by itself. I would just like to emphasize in the end that what we do matters. Humans can through whatever agency we have as individuals - or better: as groups - influence the course of history. There is no point in just sitting around, I don't think. Well, there is a point in actually doing less and consuming less but also to organize and to try to somehow influence history within the framework we talked about. I think a lot of people feel like they are not part of history, that they are only observers, but I'd like to spread the idea that we are agents in history and we do have power however small or powerless your particular self or group seems at the moment.

*And is there anything you would like to add on the Gállok case?*

What I would conclude is that the Gállok case is a continuation of a long, problematic and colonial relation between Sápmi and Sweden where Sweden has for a long time exploited the natural resources of Sápmi. This is a logical extension of that relation but within the new narrative of Green technology, Green growth. **I don't think we should look at the Gállok case as an isolated phenomenon. It is not isolated historically and it is not isolated as a material phenomenon either. Gállok is simply a node in a larger system. The more nodes we can protect, and make claims upon, from this hegemonic narrative of Green growth and Green technology, the better off we are in the long run if we want to preserve or create some sort of sustainable relation to each other and the natural world.** That's how I would look at that case.

It is also a matter of how many people you get there. We had a victory with the fossil gas terminal in Gothenburg. It shows that when people gather, they can have some form of effect on the outcomes of

these extractive projects. So I hope - not passively, I actively hope - that we can each contribute to raising the awareness and facilitate the mobility to go there. And of course we can raise awareness, but then there is also the question of action.

Considering all these questions about land use and material use of the new energy regime with the renewables they are pushing for, if it is true that a lot more land will be affected by this industrial complex in comparison with the fossil fuel complex, will that then generate more environmental conflicts? Will it push the corporate owners and the governments that are in league with their interests to actually make more decisions that will spark more unrest in this kind of cases? From the theoretical knowledge of energy systems and social systems that I have, I would say that is likely. I don't see these cases ending soon. A few years back I heard there were fifteen new mines being planned in Sweden, some of them related to this Green technology-Green economy ideal.

*I suppose that in each case they will use this argument, however hollow it may be. Beowulf Mining is doing exactly the same. The first thing you see on their web page is that they are "delivering raw materials critical for the transition to a Green Economy". It is a lie that is true. This Green transition does require minerals and mines. What is questionable about it is what exactly is green about it, not whether the resources are required. If we want to have Green growth, we will need Gállok mines and many more.*

Exactly. In that environment environmentalism will continue to be relevant. Sadly the movement has become more about a narrow climate agenda. Climate is a major issue, but it is one issue among many environmental questions. Seeing Greta Thunberg speaking out on the Gállok case is a positive symbol because it shows how climate activists who are mainly concerned with climate change may also be concerned with other environmental questions of extractivism and biodiversity. For the record, Johan Rockström and all those people working on the Planetary Boundaries are claiming that actually biodiversity, purely from an earth science perspective, is a more acute question than the climate question. I am not trying to say that climate change is not an important issue, I am just saying it is still one among many and of course they are interconnected.





ALF  
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# “Technologies are ways of redistributing labour time and natural space from poorer segments of the world-system to wealthier segments”

Conversation with a human ecology professor on Sápmi and the capitalist world-system

*“For a long time, it was us, the Indigenous peoples, who were on the verge of seeing our ways of life driven to extinction. Today, everyone, without exception, is facing the imminent collapse of the earth under our collective weight.”*

- Ailton Krenak, 'Ideas to postpone the end of the world'

With Andreas Roos we looked into the nature of renewable energy technologies, not so much as the artefacts of clever engineering that they are, but as vehicles of an energy regime, as material components of a social metabolism. The social metabolism in question is that of global capitalist civilization. Whether one tries to understand the developments taking place in Sápmi or anywhere else in the world today, it is helpful to develop an understanding of the insatiable metabolic nature of this expansive civilization. Conversely, looking into the developments in Sápmi can help to understand this, our civilization, and where it may be heading. For the last conversation in this series we linger a while longer in southern Sweden to discuss matters of history, economy, technology and civilization with Alf Hornborg, retiring professor of human ecology at Lund University.

After having worked as a sheep farmer, Alf became an anthropologist and conducted field work in various places ranging from Nova Scotia over Peru and Brazil to Tonga. Throughout his intellectual career he has scrutinized and elucidated the nature of the civilization into which he himself was born. In his latest book, provocatively titled 'Kannibalernas maskerad' ('The Cannibals' Masquerade'), he addresses the question: once the ideological and fetishistic masks fall off, what exposed material reality is left glaring through the eyes of modern civilization? How do money and technology serve to both obfuscate and reproduce what are called colonial continuities, fatally leaching on the human energy of some, overfeeding others?

**“Since the industrial revolution economic growth and technological development have functioned as effective strategies to displace work- and environmental load to other people and their landscape. As such strategies they are comparable to older societal arrangements like slavery and colonialism.”**

It lies beyond the scope of this format to delve into the details of an ethnography of the 'modern industrial cannibal' but in the following conversation we draw upon Alf's theoretical insights to better understand Sápmi in the context of modern civilization, and through Sápmi the modern world-system.

*Let us start with a very simple question. Have you ever been in Sápmi at all?*

Yes, actually I have. We had a conference in 1994 called the Indigenous Forum, in Arvidsjaur [Árviesjávrrie]. It was hosted by Sámi and I invited two friends from Canada. I had been working with First Nation people from Nova Scotia, the Mi'kmaq, and invited two of them to join us for that meeting. It's almost thirty years ago so I don't remember their names but I met several Sámi.

*The reason we want to talk to you for this publication is that much of your intellectual work and research, although none of it focuses on Sápmi, seems very applicable to what is going on in that region and why. In your work you have adopted a so-called world-systems analysis approach. Could you briefly explain what that means?*

The term itself was coined by Immanuel Wallerstein but he was very influenced by earlier theorists like Andre Gunder Frank who worked on dependency theory, particularly applied to Latin American economic development. The notion that I would say is common to that tradition is that the world economy is a zero sum game. **There are core areas that get wealthy but they do so at the expense of the periphery.** This was the theoretical common denominator in dependency theory, world-systems analysis and my own work.

*How does the core-periphery paradigm apply to the Swedish context, historically and presently?*

I definitely think it is very applicable to core-periphery divisions within nations, not only between nations. My colleague in Barcelona, Joan Martinez-Allier, has worked on India for example, showing that there were large discrepancies between core and peripheral areas in India. Of course the same would apply to most large nations, particularly countries like Sweden. So I am sure there would be ways of establishing that there is unequal exchange between core and periphery also in Sweden. But there are difficulties. In contrast to international trade statistics we do not have the kind of statistics within nations that make it fairly easy to show that there are huge discrepancies. I think it would be of course possible to quantify the flows of raw materials, energy, embodied labour, and so on from the periphery to the core even within nations.

But it would not be as easy to show that it is a rather clear consequence of differential pricing. When it comes to for example the trade between Europe and Africa or Europe and South America, it is easy to

show that the differences in how labour and other resources are priced on the market are a crucial factor in explaining the inequality of exchange. But that is much more difficult to do when we are talking about domestic exchange within a nation. Because presumably wages for example in Norrland will not be extremely different from wages in Stockholm in the same way that you can show between Europe and Latin America.

*What we see in Sápmi is that it is nowadays very much part of the Swedish nation State, surely benefiting from some of the aspects of belonging to the core of the world-system in that sense. But I would like to delve into the history of the region and try to understand how it became integrated into this system. Let us rewind about four centuries back in time, when the modern State system was coming into being. The first half of the seventeenth century was a time of constant warfare throughout Europe. The kingdom of Sweden was emerging as a mighty great power gaining control over nearly all of the Baltic region. Like the rest of Europe, Sweden got tied up in the Thirty Years' War and in need of silver bullion to back up the military expenditures. It is in this context that the first mine in Sápmi was opened, in 1635: the silver mine of Nasafjäll. Historical accounts of forced labour by indigenous Sámi and their reindeer in the transportation of the silver ore from the mine to the foundries are reminiscent of the Potosí silver mines, where on a much larger scale indigenous Andean people, llamas and mules had to perform a similar drudgery. Could you say something about the role of mining in the becoming of the colonial order and the capitalist world-system?*

Mining was extremely important in two separate ways. There was in the 15th-16th century a very strong emphasis on getting silver, as you mentioned. This was part of a European strategy to have better trade relations with China because China was always demanding silver in payment for their exports. So the silk and the tea and the porcelain and so on that was imported from China was regularly paid for with silver. It could be argued that the Spanish conquistadors that conquered Mexico and Peru were actually pursuing silver and gold, particularly silver, because of the demand in China. So the demand of silver in China was what propelled the conquest of the Aztecs and the Incas and the opening of the Potosí mine, as you mentioned. But silver, I would argue, is primarily a symbolic value. It was the substance of money throughout the old world.

But if we turn to iron and copper and other more useful metals, it is more a question of building some



kind of infrastructure with those metals. It has been very important for world-system structures because a lot of the technological infrastructure and a lot of the weapons, the arms, of the core are made out of metals. So the control over the metal trade is extremely important. It might interest you to know that in the very early phases of the British Industrial Revolution, say around 1780, much if not most of the bar iron used in Britain came from northern Sweden. So in the very early phases of the Industrial Revolution Sweden actually subsidized the build-up of technological infrastructure in Britain. Of course for every ton of bar iron that was exported from Sweden we should remember there were huge amounts of labour in forests and mines, huge amounts of forest acreage embodied in that iron - they used charcoal to refine the iron - so Swedish land and labour were very much embodied in the iron that was imported to Britain. Of course the same would apply to iron exported to other parts of Europe or even Sweden: that there was a drain on labour and land.

*That is interesting indeed, maybe all the more so since the company that wants to exploit the Gállok mine is a British company as well. One could argue that there is a continuity there. Perhaps it is also no coincidence in that context that the first railway in Sápmi, between Jiellevárre-Málmavárre and Julevu was financed by British capital as well (finished in 1888).*

*But let us focus a bit more on the role of Swedish nation State. You said that Sweden was providing some of the raw material, primarily iron, for the Industrial Revolution in Britain. In that sense Sweden served as a peripheral region to the British industrial core. Maybe we can try to refine this core-periphery dynamics by viewing Sápmi, and perhaps also the ore deposits in central Sweden, as an internal periphery within Sweden. Let us look at this statement by Lord High Chancellor Axel Oxenstierna, one of the architects of the modern Swedish State, counseling the Swedish King in 1620: "In the North, we'll have within our borders an India, if only we understand to use it."*

*So there is something going on there. At this time in the seventeenth century we have a process of State formation, and we have such statements coming out of the very core of that State formation process. Could you comment upon the relationship between early modern State formation and early modern colonialism, expressed in these internal periphery dynamics and more generally?*

Definitely the core region of Sweden, Stockholm and

the government, were really interested in opening up the North as a resource frontier in which to extract resources and of course labour. This was a pattern that really goes back to pre-modern times when the most important way in which an empire or a nation could expand was to gain control over more land and more labour. This was before the Industrial Revolution, I would argue, when a little country like England which did not have very much of land could expand through trade. It could produce a lot of manufactured goods, selling them on the world market and by selling them gaining the capital they needed to import resources. The idea that England was a workshop of the world is really turning things upside down because England was actually appropriating enormous amounts of embodied labour and embodied resources from its colonial empire in order to manufacture those products for export. I would argue that is very similar to what the central regions of Sweden came to do. They didn't have colonies but they had Norrland and used the timber, the minerals, the labour, finally even the hydroelectric power and so on from these vast extractive regions in a way that is very similar to what the colonial powers did in their colonies.

*The Nasafjäll mine turned out to be unproductive and remained in use only from 1635 until 1659, when it was marauded by Norwegian troops. What we see is that the exploitation of the first mine in Sápmi coincides with Sweden's short-lived oversea colony in the so-called New World: New Sweden on the lower Delaware River, from 1638 to 1655. New Sweden ended up being ceded to the Dutch empire. But the Swedish grip on Sápmi progressively tightened, as we can see up to this day. We briefly touched upon forced labour - which also involved torture practices -, land grabbing and a process of ethnocide over centuries: a deliberate destruction of the ethnic and cultural identity of a people, not through outright genocide physically wiping out the population but by taking children away from their parents and forcing them to boarding schools and so on. All this State violence happening in early centuries of colonization remains a dark spot that liberal ideology likes to either ignore completely or condemn to a colonial past that lies definitively behind us. In your work, as well as that of Frank and Wallerstein as you mentioned, it is argued that structural inequalities that were created in the classical colonial era have actually been consolidated up to the present day. You have developed the concepts of ecologically unequal exchange and environmental load displacement to understand this continuous process. Could you briefly explain what you mean by these terms?*

To understand ecologically unequal exchange we need to look at world trade through a different metric than money. Mainstream economists think of trade exclusively in terms of exchange values: what is the monetary value of the resources and the commodities that are being traded internationally? But it is possible to convert those monetary trade statistics into other metrics. The four metrics I have particularly looked at are embodied labour, embodied materials, embodied land and embodied energy. Maybe the word embodied is confusing so I'll explain it. By embodied resources I mean the physical quantity of that resource that has been used through the production process, from the first extraction all the way to the finished product. Of course only a small fraction of all that is visible in the product, because much of it is slag heaps, wasted energy, dissipated labour time and so on. But it is possible to reconstruct how much of these four resources have been invested in a product.

To calculate ecologically unequal exchange, we have shown how there is a net transfer of biophysical resources - labour, land, materials and energy - to all the three major core areas of the world economy: North America, Europe and Japan. It is a way of challenging the mainstream economic model that trade is only about money. It is to show that trade is a very material process, a question of transfers of material resources that go into making an industrial infrastructure. The economists are usually at a loss how to handle this. Their entire training is only about money and markets - exchange values - and when somebody starts talking about person-year equivalents or tons or joules or hectares, they're lost because they don't calculate in those metrics. In that sense mainstream economics operates as a kind of ideology, I would argue. **I don't think there's a conscious conspiracy behind it but ideologically mainstream economics serves as a veil that conceals, obscures the materiality of appropriation that goes on every day in the world-system and explains the huge inequalities between the poorest and the wealthiest people in the world.**

*Maybe we can come back to the notion of environmental load displacement and apply that to the case of Sápmi. It seems like the population at large is not really impoverished - it is part of the core and part of the Swedish welfare State and therefore materially quite wealthy - but what we observe is that there is ever more exploitation which greatly impacts the environment as well as the ways of life of Sámi people. So even though the region might not be impoverished to global standards, it has to deal with a lot of environmental costs that are being imposed*

*upon it to the benefit of the industrial development of Sweden. What is the relation between industrialism in Sweden and the necessary displacement of this load elsewhere, be it in Sápmi or anywhere else?*

The concept of environmental load displacement is very important because it is part of the social metabolism of the world-system. It is not just a matter of appropriating resources from the periphery. You also have to get rid of your entropy, to speak metaphorically, the waste. Economists like to say that environmental costs are externalized. I don't like to use these economic metaphors. But it is very true that when core areas draw on resources from the periphery, it means extraction. In the same way that Britain once used for example North America as an arena for environmental load displacement, definitely Stockholm has been using Norrland: clear-cutting of forests, damming of rivers, mining of metals, and so on. In order to build up an infrastructure and wealth in the core area, you are displacing your environmental extractions and requirements onto a peripheral area. This is very clear if you look at what Europe did to the rest of the world during its colonial era but you can see the same kind of processes going on in the world today, and within nations such as Sweden, today and historically.

The case of Sweden is actually very similar to Canada, where I worked, where the urban areas of Ontario and Quebec have been drawing on resources from a huge area. By the way, the situation of many First Nation people in Canada is very similar to that of the Sámi. They were also victims of ethnocide, their children were placed in residential school and the Canadian government has actually apologized for their ethnocide much as the Swedish Church did some time back. So the situation is very similar: there is a kind of internal colonialism in both countries that has been very beneficial to core areas and has occurred at the expense of the periphery.

But there is also the difference compared to the colonial situation in the world. Lumberjacks and miners in northern Canada do not get the same kind of wages as people do in South America because they are part of the Canadian nation in the same way as people in Norrland are part of the Swedish nation. So the main inequality, I would argue, that you can see in nations such as Sweden and Canada, is precisely about environmental load displacement, as you mentioned. We're seeing huge peripheral areas of these countries being used for resource extraction for the benefit of few people whereas a lot of people who live in these areas are experiencing destruction of the natural environment.

*These lumberjacks and miners in Canada that you mentioned of course exist in Sweden too. But in a way they are becoming a rare breed due to technological progress. On the other hand in core regions the wages of miners and lumberjacks don't have to be terribly low. How does this development relate to environmental load displacement?*

This is a really important issue. **A lot of the technology that countries like Canada and Sweden use in extracting their resources - we've all seen the kinds of very advanced machinery used in Swedish mines and Swedish forests - are in themselves products of accumulation. They are part of the Global North's accumulation of resources globally.** So we can think of exploitation as going on on two levels. On the one hand, Canada and Sweden are countries that participate in the exploitation of the Global South and are able to build up a very advanced technological infrastructure. On the other hand, they are able to use that technological machinery to extract resources from their own territory. So when these machines go in and dig up whatever they need from the northern parts of Sweden it is actually a part of the global metabolism. These machines are not available to all poor countries in the Global South. They are available to Sweden and make it possible for Sweden to extract resources in the north of Sweden by using technologies that are built on the exploitation of the Global South. That's how I would argue.

*This pretty much questions the linear vision of technological progress and the promises associated with it - that technological progress is inherently liberatory: it liberates time, it liberates energy. Are you arguing against this vision?*

Definitely. I talk about time-space appropriation. Put very simply, I would argue that advanced modern technologies are ways of saving time and space for those people who can afford them at the expense of time and space lost to the people who cannot. **Technologies, from a global perspective, from a world-systems perspective, are really ways of redistributing time and space: labour time and natural space from poorer segments of the world-system to wealthier segments.** Of course this creates enormous problems for anybody who wants to see technology as a salvation. The more advanced our technologies get, the more complex they get, to use a word from Joseph Tainter's 'The Collapse of Complex Societies'. The more complex they get, the more resources they require. Those resources have to be extracted from somewhere. I do not see technology as a potential liberator.

Here is, I should remind you, a major difference with classical marxist theory. I am very much inspired by much of marxist theory, but I do not believe in the Promethean trust in technology that Karl Marx had. He realized that technology in the nineteenth century was monstrous, it was horrible for the working class, but he persuaded them that in the socialist future technology would be a liberating force, something that would make it possible for the workers to have more leisure time, ease their burdens, and so on. I think we are now at a point with climate change and increasing global inequalities, much later in history, to see that this was a utopia. Technology is not going to save us. We need to rethink the role of technology in history.

*Can we try to make this a bit more concrete? We are talking about labour saving methods in the north of Sweden, say through a highly automated mining sector, which, you are arguing, is predicated on exploitation elsewhere. Could you elaborate on that? Which flows of material are involved?*

A lot of the electricity we plan to produce in Sweden with sources like photovoltaic power and wind power and so on. It seems like: 'Okay, here we are, just harvesting natural forces, no problem, there are no social power relations involved.' But if we look closer at photovoltaic panels and windmills, we realize that these technologies for harnessing natural forces are in themselves products of political relations, societal exchange relations. I can just mention photovoltaic panels for example, They are mostly produced in China by labour that is paid about 20 to 25% of an average European wage and they are produced with coal - fossil energy - and the minerals are also extracted in Mongolia and other areas with heavy environmental destruction going on. So when Europeans, perhaps in particular Germans, find themselves sustainable by putting photovoltaic panels on their roofs, they are in fact exploiting the labour and environments of China. I could say similar things about electric cars, ethanol, bio-fuel for driving our cars,... In all those cases we are displacing environmental requirements onto poor segments of the world-system.

*Yet nowadays there is all the talk of Green transition and the buzzword of sustainable development, which is applied specifically to peripheral regions of the world-system. In a previous interview we talked to Johanna Lindberg, an inhabitant of the village of Björkholmen next to the Gállok site who used to work in various governmental institutions around sustainable development. She told us that such activities as reindeer herding were not taken*

*into consideration when talking about sustainable development, their contribution to GDP growth being negligible. Could you give a more general assessment of the notion of sustainable development as a means of emancipating these peripheral regions?*

Sure. I actually remember when that word first was coined and everyone started using it: when the Brundtland Report was published in 1987 - 'Our Common Future' - and the 1992 conference in Rio de Janeiro [on climate change took place], and so. If you look back historically, since the early 1970's there was a strong hesitation about economic development, economic growth and fossil fuel technologies. A lot of things happened in the early seventies, in part because Europe and North America were going through an economic downturn. Then it seems like fifteen years ahead, in 1987, the establishment had consolidated a new discourse on sustainable development, which basically said that: 'Okay, there are problems, there are inequalities, there is environmental destruction, but the way of remedying them is to have more growth, more development, more technology'. **This is exactly what Joseph Tainter showed that civilizations repeatedly do as they collapse, or just before they collapse: they try to solve their problems by doing whatever they had done up till then more intensively.**

I would argue that what we learned in 1987 and the 1990's and ever since then has been to intensify technological development. And what's been the result? I mean: look at the carbon dioxide emissions, look at the widening global gaps, look at the acidification of the oceans. We have not grown any more sustainable in the fifty years since the early 70's. We have simply added to our problems and displaced them to other areas of the world-system. **We believe that by driving electric cars in Sweden we're going to contribute to mitigating climate change, but what we're really doing is displacing carbon dioxide emissions to other nations, to put it very simply. This goes for very much of this Green technology which I think is a huge illusion, actually.**

*This is exactly what we see in Sápmi: ever more energy is required to produce such things as 'Green steel', steel being needed for the production of renewable energy infrastructure such as wind turbines that in turn are required for the Green energy to supply the Green steel factories. In Sápmi boreal forest is clear-cut for massive wind parks, open-cast mines dug out for iron ore and rare earth minerals, dams and hydroelectric installations disturb the watercourses, new roads*

*and power lines are required, heavy metals leak into the waterways, poisoning aquatic ecosystems and foreseeably ever more drinking water, all of the above contributing to methane and carbon dioxide leaching into the atmosphere. And all that for the sake of Sustainability. There seems to be a perfidious circularity about this whole logic circumventing the underlying productivistic motivation and the inherent unsustainability of industrial capitalist civilization.*

I agree completely. I think machinery and technological development is more about making money than about saving time or becoming sustainable. I think it was more difficult a few years back to talk about the illusions of Green technology because it seemed as if the arena was much more simple for a lot of people. They saw that on one side there were the climate denialists like Donald Trump who wanted fossil fuels and on the other side you have the Leftists, the progressive people who wanted a sustainable world and wanted Green technology. It was like: yes or no, black or white. Now I think we are in a period when it is much easier to see that there are other positions than these two.

There is the possibility of acknowledging that there is a real climate threat, that anthropogenic climate change is a reality and that we are facing disaster. That does not mean that we have to believe in wind mills and solar power as the solution. This is pretty difficult because many people even on a psychological level believe that 'well, if there is climate change, then we have to choose other technologies and then we have to believe in them'. But more and more people are hesitant and doubting this. The Canadian energy specialist Vaclav Smil, who is probably the most famous energy expert in the world today, wrote a short article called 'What I see when I see a wind mill' and there is a huge illustration of a wind mill dripping with oil. The article is a calculation of how much fossil energy has been invested in producing that wind mill. This is just the wind mill, not the power lines, the transports, all the other aspects. One easy way of thinking about this is to remember that almost ninety percent of all the energy used in the world comes from fossil energy at the moment. That means that whatever kind of technological infrastructure we're building, whether nuclear or hydroelectric or solar or wind or something else is to almost ninety percent built with fossil energy. Even the hydroelectric dams - the cement in the hydroelectric dams has required enormous amounts of fossil energy.

Of course people say that after a while we won't have these carbon dioxide emissions. But these

infrastructures have to be reproduced and rebuilt and they're not built with electricity. The wind mills and the hydroelectric dams are not built with electricity. So I think we have to look much deeper at the problem. **It is not just a question of what technology should be used to maintain modern civilization. We should start asking: do we really have to maintain modern civilization?** How many is it accessible to? Maybe we should think in terms of degrowth and radically scaling down our levels of consumption, in the North particularly, and of energy, in particular.

*I would say none of this is completely new. There has already been the Club of Rome in 1972, for example. Why would it be, then, that this message still seems to be a very marginal message, even though it also seems very obvious?*

Well, there is a very strong power structure involved. The discipline of economics is not just one academic discipline amongst others. It is also the basis for most policy. Politicians usually think in terms designed by the economists and they rule our lives from the municipal level up to the level of the World Bank. So we have a very strong ideology that prevents us from seeing some of these connections and the material aspects. I mean: economists don't really have to worry about nature. I am sure there are many economists out there who have never heard of entropy for example, or thermodynamics. They don't have to think about nature to become a professor of economics. This is a huge problem: the compartmentalization of knowledge in modern society. I think this is one of the reasons.

You mentioned the Club of Rome, 'Limits to Growth'. They used computer graphs from Jay Forester. He fed all kinds of information on population, economy, pollution,... into a computer and asked the computer what the future would look like. Around 2025, which is not too far ahead now, there was a radical drop in almost everything: the economy, quality of life, population, and so on. So it looked very much like a collapse. In 2004 there was an update to that: 'Limits to Growth: 30 year update'. In that book the authors argued that by and large their predictions were still valid and that we were heading towards some kind of collapse, and they are by no means alone in believing that. The difficulty is getting mainstream politics to acknowledge this, not to mention to get mainstream economics to acknowledge this.

*Is it necessary to go over mainstream economics or mainstream politics? Let me refer to a Degrowth*

*event at which you delivered a talk. You identified the nation State as a plausible actor to implement some kind of plan B. This choice, I think, many people would find rather surprising, if not outrageous, given the modern nation State's role as a vehicle for social and ecological exploitation pushing us to the abyss. How do you arrive at this idea of the nation State being the most appropriate agent?*

Well, I guess in part because I believe in democracy - I must say it is one of the few things I do believe in. I believe that the nation State is not just simply a malevolent power. It could be an organ to represent the population. Of course, as you know, the representation of various perspectives in parliament could change very radically and I believe it will at one point in the future because a lot of the mythology that the nation State is now built upon will simply collapse, the bubble will burst and people will see that they need most of all food, water and heating and they will vote for a government that will see to it that they have food, water and heating. That is not the government we have now.

We have a government that is prioritising the role of Swedish industry on the world market, not how to for example decrease our vulnerability as a population of ten million people when the collapse comes. I have compared for example the plans for how Swedish society could support itself with food and other necessities in the case of a catastrophe of some sort and there is a huge difference between a report published in 1981 and what we received in 2018. It seems like the neoliberal era has involved a complete dismantling of food security for example in Sweden. This is maybe a distraction from your question but I do believe that the State could ideally be an organ to take care of our interest as a population rather than simply taking care of the interests of our industries. When Norrland is being clear-cut and its mines exploited, this is done in the interest of industry and economic growth in the core regions. It is not done in the interest of the local population at all. But I mean that it is theoretically possible to organize political life in Sweden in such a way that local populations are guaranteed some kind of security, which is not the case now. I don't think we should discard the idea of having a central government - I am not an anarchist in that sense - but we need to reshape it completely. I think it will be reshaped from the bottom up as soon as we find out that life in Sweden is not quite as comfortable any longer as it is at the moment.

*Where do you see Sápmi in this vision? Nowadays there is the Sámi parliament which, one could argue, serves as a kind of a veil: it has neither legislative*

*nor executive or judicial power, at best it is some kind of council which can easily be ignored by the Swedish government. In Sápmi one hears voices saying that having a Sámi nation State is not in their interest. Do you see space for a dissolution of the colonial Swedish nation State?*

First of all I must say that I don't know very much about the situation for the Sámi, but I do know a lot about indigenous populations in other countries like Canada and Peru and so on. That they are very often victims of colonizing processes is very much a definition of being indigenous. If somebody asked me what it means to be indigenous, I would argue that it is a population that has been able to maintain a connection to their land, often without having to become completely absorbed by the global economy and a monetary economy, often without having moved into urban centres and so on. And of course all of this has made it possible for them to maintain some kind of cultural continuity. We can see this among the Mi'kmaq, many of the Peruvian groups I've worked with and of course among the Sámi.

The question is: how would these groups be able to sustain themselves in the aftermath of an economic collapse? I think: very often very well, because they are not as vulnerable as the rest of the population. They often have a capacity to support themselves from their local ecosystems that other people around them, at least in Canada and Sweden, generally don't. But they would need support in the long run for their subsistence activities to the extent that they are sustainable and provide a sense of food security.

*This is precisely what is happening, I believe: the very ecological foundations upon which this subsistence could actually exist, are being undermined systematically at the moment. So whichever plan B could be conceived - and let us not get into a discussion of whether that involves the State or not, that could be a rather long discussion - it will have to depend on certain ecological foundations that are rapidly being erased as we speak. So perhaps we could finish off with some questions relating to how we face the present, not just the future, in a context of intensified ecocide on a global scale. Is damage control by any means the task ahead?*

One thing that gives me a sense of hope is the revival and re-evaluation of indigeneity and ethnic diversity that we've been seeing over recent years. I've seen this very much in Canada. Wherever we look in the world there is a sort of respect for cultural diversity. I think that politically a group like the Sámi probably

have a lot of possibilities for asserting their case. I can imagine that they are as repressed as they were a hundred years ago but there has been a growing recognition of their rights and their capacity to create their own future. In Canada huge territories have been set aside for indigenous groups - Nunavut for example - and in South America there is a strong respect for indigenous groups. I think Sámi could extend those rights beyond what they have at the moment. But I'll have to put the question to you. Do you see their resource base being systematically destroyed now by Swedish enterprise?

*Exactly. What we are being told by people there is that there is a cumulative effect of forestry clear-cutting the old growth forest necessary for reindeer herding, mines taking up ever more land and polluting the waterways, the dams disturbing the marine ecosystems necessary for fishing as well as the ice necessary for reindeer migration. Of course there are also the effects of climate change: erratic weather melting the snow in winter, then freezing again and covering the surface in a sheet of ice which impedes the reindeer from finding their lichen. Ever more roads, electric power lines,... It is the cumulative effect of all of these developments that makes particularly the practice of reindeer herding increasingly unviable. The import of industrial fodder is a symptom of the circular subsistence economy falling apart.*

*But let us come back to the recognition of indigenous rights. I would challenge that there is this increased recognition. What we see is perhaps that Sámi traditional dress is being accepted or cultivated, they can have their parliament where they can meet in traditional dress and so on, but when there is the question of whether or not to open a mine for the benefit of English finance capital, they can say they dislike that but can equally easily be ignored. I think this is a tendency globally with indigenous people: they are recognized on some cultural or symbolical level but when it comes to the material reality and sovereignty over their territory it's a very different question.*

Swedish reluctance to comply with ILO convention for example surprises me so much because Sweden is usually thought of as quite a progressive country with, you know, quite a big respect for human rights and so on. In comparison with the Sámi in northern Finland and Norway, would you say the Sámi in Sweden have a worse situation?

*It's hard for me to tell. You should ask Sámi people. What is true is that Norway has recognized ILO 169,*

*unlike Sweden. What that means on the ground is a different question. It doesn't really seem to change that much.*

Both Finland and Sweden are part of the European Union. I imagine that being the most important indigenous group in the EU, if not the only one, the Sámi should be given special recognition on the European level. I wonder if that's where the Sámi should take their complaints and their battles. If they haven't done so already... - you see how ignorant I am of what's going on?

*Well, I think that is quite telling - not to ridicule you personally. It seems like it is a blind spot on the Swedish consciousness that likes to think of itself as being very respectful towards human rights as well as environmental responsibility and so on. It's easier to blame evil Bolsonaro for everything that is going wrong in the world than to look in the own backyard. Let me ask one more question that is somehow related to this and also comes back to world-systems analysis.*

*What we see in Sweden is a concentration of mining in the north, which makes sense within a core-periphery divide. Yet also further south, even in Scania county, prospection has been going on recently. In Österlen an Australian company seeks to open a vanadium mine, for rare minerals required in the battery industry. The project has been met with protest, understandably. One could claim, though, that extractivist projects exceptionally undertaken in the privileged core regions of the globe should be welcomed in that they could decrease the burden on the already over-exploited peripheries. You want smartphones and electric cars? Bring ecocide home, so to speak. Does that make any sense to you?*

It is very interesting structurally to see that when the resource requirements are brought home, there is a protest, but as long as they are up north somewhere or overseas it's not a problem. So definitely we can be very cynical about this. **I guess the conclusion that should be drawn is that if people in Österlen don't want such a mine in Österlen, they shouldn't want Smartphones either. The technology that we associate with modern civilization is today very much a privilege of the core. If we're not prepared to take the consequences environmentally of that technology, then we shouldn't be using that technology at all.** It seems to me that that's the trajectory that we're heading towards now that we know what we're doing to the global climate, atmosphere and so on. We have to somehow radically rethink what civilization is and to what extent it must

require core-periphery relations with technological accumulation in the centre.

There are points when I'm glad that I'm approaching seventy and I won't have to experience the hard times ahead. That sounds very cynical but seriously: I think there are great problems facing humanity. [...]

I guess we have to see that the enemy is really very much a question of technology. There are points when I think: technology is capital. The big mistake we have made is to distinguish between capital and technology. I think that is what we have to work on.

*How do you imagine that more concretely? Which kind of technology could continue to exist? As homo sapiens sapiens, especially the kind that we have become, utterly dependent on all of these technologies, we will continue to depend on some kind of technology.*

Well, it was quite possible to live a decent life in England or Sweden in the mid-eighteenth century – if we try to imagine a society where you don't have the huge inequalities between aristocrats and paupers. The Luddites of the early nineteenth century were ordinary handloom weavers. They were used to living a comfortable life weaving textiles manually. They were so angry when the machines took their jobs away from them that they started breaking the machines. What we should understand is that up to that point they were living quite comfortably without any fossil energy in their lives. So physically it's quite possible to live a decent life without fossil energy and we're going to have to do that - pretty soon, I think.

*They were living in the Holocene though. That will not be the case anymore.*

That's true. We're going to have climate change, whether we like it or not. It will continue for centuries even if we should stop right now with greenhouse gas emissions.

Since you asked which technology I could imagine - I am a gardener myself. With two to three hundred square meters of soil and manure I can feed my family. When we talk about the average American ecological footprint today being almost nine hectares per capita and I talk about three hundred square meters (one hectare is ten thousand square meters) you realize that our consumption is so unnecessary for us to lead quite comfortable lives. That's where I have hope for the future, I guess.





# CONCLUDING REMARKS

*“What we need to do is resist, instead of accepting never-ending negotiations where business as usual leads to further loss of Sámi territory, lands and waters. The way I see it, resistance is the only remaining possibility in a desperate situation. The Sámi Parliament on the Swedish side of Sápmi has already spoken all the words that may be spoken, in documents and statements. So far, none of our actions have had any significant effect on the dominant Swedish society. The colonization and destruction keeps continuing, without any stop.”*

- Stefan Mikaelsson, reindeer herder and former chairman of the Sámi Parliament

*”When you are bitten for a long time, you start to bite back in the end. I speak for myself and my family. I want that my children, grandchildren and others have the possibility to choose whether they want to live the life that our ancestors and I lived, and continue our heritage.”*

- Rickard Länta, Jáhkågasska tjiellde reindeer herder

In this publication we have taken a journey to Sápmi as the framework for an assessment of the Gáλλok case. Gáλλok then became our stepping stone for an inquiry into Sápmi’s colonial history and present. And this regional history served as a case study through which to explore more general questions pertaining to ecocide, core-peripheral relations, modern civilization, the role of technology within this civilization, ecological overshoot and the urgent need for economic degrowth and de-industrialization.

From the moment one starts looking at the issues surrounding the Gáλλok mine, it becomes evident that they are multi-layered and that one can only begin to properly understand them once one is willing to see them within a broader context. Of course there are all kinds of direct issues, such as the direct usurpation and destruction of the land and direct forms of pollution. The same goes for clear-cutting single patches of woodland: the direct consequences are obvious but only when one takes into consideration the larger scale does the real magnitude become apparent. Throughout the conversations we’ve had, what is reiterated time and again, is the cumulative effect of a seemingly endless series of ecologically degrading and colonially imposed land use changes. It is the aggregate of those changes that forces upon Sápmi a qualitative transformation from an ecologically integrated cultural landscape to an industrial-extractivist hinterland, enacted by the twin forces of colonialism and ecocide.

This booklet does not assume the form of a manifesto but of an inquiry. That means that it asks questions. Since its conception happened independent from both governments and NGO’s, it may ask somewhat different questions than one is used to from environmental magazines. For example:

Is it outrageous that some people would rather try to survive the Anthropocene as reindeer herders on the same wind-swept fell that their ancestors have known for thousands of years, than as alienated wage labourers in an open-cast mine, a harvesting machine or a brand new lithium battery factory - industries that symbolize the nemesis of their land, culture and existential embeddedness? Is it envy that will have us insist on the subsumption of the whole world into our zombie society before it succumbs to its own insanity?

Is it the industrial centres where fossil energy is being transformed, or the urban centres where the commodities of industrialism are being consumed, that are undergoing a transition towards ‘sustainability’? Or is it predominantly peripheral areas that were neither industrial nor urban centres that are being industrialized and exploited for the sake of ‘sustainability’ – not as a replacement to fossil fuel industry but as an addition to it? And if this be the case, what to think of the magic formula to conjoin the mutually exclusive progressive dreams of sustainability and development into the oxymoronic marriage called ‘sustainable development’? Is it not a newspeak veil for continued ecocidal and colonial capital accumulation?

But what if economic degrowth were actually implemented and a genuine decarbonization pushed for – would steel not be required for a transitional infrastructure away from fossil fuel dependency? Would steel-based wind parks not be preferable to coal mines to cover the high energy requirements that our societies have become so direly dependent upon, even if their economies were liberated from the growth imperative? A

valid question. But a counterfactual one. Our societies are not guided by reason. Ours are societies ruled by a narcissistic Reason with capital R, where the gift of human intellect is as exalted as it is directed towards unreasonable pursuits, where phallic monuments to industrial grandeur like the Eiffel Tower not only stand erect but are being replicated from Mexico to China, where new open-cast mines are being opened while obsolete wind turbines stand to rust along with the other skeletal remains of leaching industrial debris littering land and sea alike... What is steel actually used for anyway? Sure, it is used for wind turbine pylons, but no less for the rest of the steel-and-concrete construction industry, the car industry and the war industry.

What of good intentions towards some form or other of 'saving the world', in its manifold formulations? When people talk about saving the world, what do they mean? Preventing the planet from being consumed by a supernova? Not quite. When we talk about saving the world, we generally mean saving our world, our image of the world, our physical environment. As people who tend to talk about saving the world are people whose world is this moribund civilization of globalized industrial capitalism, what is really being talked about is saving the world of this civilization. The world of this civilization has throughout its history proven incapable of coexistence with the many other worlds that have existed in the world. In our attachment to our self-annihilating world, are we willing to deny other worlds the possibility of existence - for the sake of 'saving the world'? What would it mean if we weren't? What if we asked, with professor Hornborg, "Do we really have to maintain modern civilization?"

Of course many people would find a negative answer to that question an insane proposition. An honest appraisal of our dependencies upon this civilization may lead one to feel like a fish on a dust-dry riverbed at the thought of its disintegration. Yet who can deny that the firmer we cling to these dependencies, the more we insist on deepening and widening these dependencies, the graver the predicament, the greater the injustices, the more ruthless the sacrifices become? Who can deny the inherent unsustainability of this civilization – read: the inevitability of its disintegration? What we are talking about here is the recognition of our pathology as a precondition for moving away from disavowal towards a mature attempt to change course. This would not lead to a direct solution to the problems of the ecological overshoot of our social metabolism; it would change the terms by which these problems are faced at all.

Thus, posing the question, considering the question, does not amount to a categorical and purist primitivist demand (this is not a manifesto). Nor does posing the question in relation to Sápmi amount to a romanticization of the noble primitive Sámi (this is not an ethnography). We are not interested in the denial of contradictions, we are interested in opening a window to industrial capitalist civilization's antithesis.

The indigenous philosopher Ailton Krenak notes that not even the world's indigenous peoples exist nowadays without any outstanding debt to the land. Surely, Sámi, integrated as they are in the fossil-fueled global economy, would be no exception to his verdict: "No community that is in debt to the land can call itself sustainable, because we take out more than we can put back in."<sup>1</sup> Sámi reindeer herders live in houses with electricity, maybe they have a fridge, a computer or a television. They have four wheel drive cars, use snowscooters and quad bikes for their work, sometimes even helicopters. They are not some sort of primordial, innocent, pre-industrial people. They do not live in intact tribal societies based exclusively on mutual aid and free from monetization and commodification. They are far from being the poorest people in the capitalist world-system. In Krenak's terms, their current way of life can hardly be called sustainable (whose can?).

Yet, all contradictions of a hybridized, semi-industrialized culture considered – are those inclined towards conservation and restoration rather than towards perpetuated extractivist plunder not best suited to inherit from this ageing civilization their own homeland? Perhaps whatever is left of Sámi culture will prove to be beyond salvation, dependent as it is on an Arctic climate that is being flung out of its Holocene equilibrium. Or perhaps the people of Sápmi would make a mess of the land and waters themselves. But with what right can Stockholm – or London, or Beijing – ravage the land and poison the waters of a whole region for the sake of elevated numbers on an already saturated iron ore stock market?

It has become rare in the world today, rarer still in Europe: (the vestige) of a culture that has established neither metaphysically nor economically a dichotomy between nature and culture, ecology and economy. The sylvopastoralism of the reindeer herders thrives on the reindeer's integration in their natural habitat – there is no contradiction between economic rationalism and ecological integrity. The congruency between the reindeer

<sup>1</sup> As Krenak writes in his *'Ideas to postpone the end of the world'*.

economy and ecology is the cradle of their culture. They neither want nor need mines and deforestation. Their short, medium and long term economic interest – not to mention their cultural, spiritual or aesthetic interests – is in favour of preservation and restoration of environments rich in biodiversity and apt at carbon sequestration. In other words: favourable to life. At least in Europe, where societies are so deeply immersed in commodity fetishism, dependence on industrialism is rampant and animal husbandry tends to degrade the ecology and everyone involved, this is quite rare.

It seems clear that in multiple ways the struggles of Sámi people against exploitation imposed by the Swedish State and venture capitalists are of interest to anyone concerned with the global climate, the biodiversity crisis, the treatment of indigenous populations and matters of autonomy and self-determination. Confronted with the ways in which environmentalist campaigning leading up to a broadened societal awareness of the joint threats of the climate and ecological crises is being co-opted by capital interests, the question is raised: shall we allow investment capital to corrupt our endeavours into a green-washed justification strategy for plundering and polluting the lands of Sápmi's indigenous population?

Out of that question the next ones naturally emerge: how to support the Sámi people around Gállok in preventing this mine from further scarring the land? How to prevent the Swedish forestry from continuing to perpetrate their climatically disastrous acts of ecocide?

The editors of this publication believe that when the cumulative effects of extractivism and industrialization that have been mentioned over and over by nearly all the people we talked to, can be brought together in a focal situation of political defiance, a campaign around a single issue can have the potential of challenging business as usual beyond that single issue – even if the campaign itself should fail to reach its direct single issue goals. When what is considered normal becomes unbearable, the steady course of normality has to be disrupted, a situation created that challenges business as usual. Let us bear in mind that, whatever preferences and attachments we might have, as the ecological crisis deepens, capitalist normality will inevitably become increasingly unbearable for ever larger portions of the world's population.

On the Norwegian side of Sápmi, such a situation was created with the Áltá Crisis in late 1970's and early 1980's. The Áltá River was dammed, but a milestone was erected in the history of Sámi emancipation and self-assertion whereupon the colonial government was forced to reconsider its normal attitude towards its indigenous subjects and their land. Similarly, though in a somewhat different political and cultural context, when one tries to understand how it came about that the Canadian government set aside territories for a significant degree of indigenous self-determination, as referred to by Alf Hornborg, one cannot ignore the role played by the Oka Crisis of 1990. Here, a blockade led by a bold group of Mohawk and supported mainly by other indigenous but also non-indigenous allies, culminated in the Canadian authorities sending the military in to lay siege upon an indigenous settlement – a most uncomfortable situation for a settler-colonial liberal State tainted by a history of genocide. Its policies would henceforth be marked by the specter of Oka. Of course, in neither of these two examples the disruption of normality definitively overcame that normality – i.e. the colonial normality – but the effects, though hard to measure exactly, reached far beyond the specific time and place of the manifested situation.

How the situation in Gállok will develop we do not know and it is not for us to decide. What is up to everyone to decide for themselves, is how to position oneself when London and Stockholm send their minions to Gállok in the name of some so-called Green Transition and the local population reaches out for support.

By raising the questions that have been raised and offering a platform to the voices that have spoken, we hope to have stimulated reflection and awareness. Out of them may grow debate and action. Out of them may grow a disruption of what we deem an increasingly senseless and fatal normality.

# GLOSSARY

Here follows a list of unusual or specific terms used in this booklet that might require clarification as to their meaning and/or significance to the themes of this publication.

**Agent Orange:** a chemical herbicide and defoliant most infamously used in the Vietnam War, where it was used to defoliate over three million hectares of forest. The development of the herbicide was a side effect of biochemical research by a plant physiologist trying to accelerate the flowering and fruiting of soybeans. Discovering that a certain dose of the phenoxy acids leads to defoliation rather than flourishing, the chemical was adopted by the US Army for biological warfare purposes and mass-produced by companies like Monsanto. In Sweden the same chemical composition went under the name of *Hormoslyr* and was used from 1948 to 1984 by various forestry companies, including SCA and Sveaskog, to combat broadleaf trees in Sápmi's forests.

**Albedo:** the measure of the diffuse reflection of solar radiation out of the total solar radiation. The lower the *albedo* (literally 'whiteness'), the more solar radiation is absorbed; the higher the *albedo*, the more solar radiation is reflected. Thus, glaciers have a high *albedo* value, open cast coal or iron mines a low *albedo* value; deciduous forests a relatively high and evergreen spruce plantations a relatively low *albedo* value. As white glaciers turn dark with soot, their *albedo* decreases and their melting accelerates, exposing ever more dark rock surfaces with low *albedo* values in what is called a positive feedback loop. The melting glaciers add to an increase of dark oceanic surface, which again has a low *albedo* value, resulting in another positive feedback loop. As such, *albedo* is a significant factor when it comes to microclimate as well as global warming.

**Allmänningar:** Swedish for 'commons'. In the context of Sápmi, *allmänningar* are associations of landowners that were formed in the aftermath of the allocation of land to settlers (*nybyggarna*). As a strategy for consolidation of their land title when met with tax pressure from the State, settlers with land title formed these associations to turn the land into profitable assets, including clear-cutting based forestry and mining concessions.

**Civilization:** a human ecology based on urbanization, political centralization, bureaucracy and resource extraction from the rural periphery to sustain the metabolism of its densely populated urban centers that are unable to sustain themselves from their local ecosystems. As they expand, civilizations incorporate ever greater territories and the human cultures inhabiting them, eventually overstressing their material basis and/or the ideological constructs their societies are based on.

Modern civilization refers to the civilization of global capitalism that has spread from Europe across the rest of the world over the last five centuries. It is characterized by an unprecedented geographical width and an unprecedented technological depth, the complexity of which implies that at this stage its material reproduction depends on myriads of links that have become unfathomable to its human members who are thus, to varying degrees, alienated from each other as well as from the reproduction of their material existence. In accordance with an imperative on endless economic growth as its central material feature, the belief in Progress can be seen as its central ideological feature.

**Club of Rome:** an association of scientists, industrialists and other intellectuals that first met in Rome in 1968. In 1972, a year before a global oil crisis broke out, they published a pamphlet called 'The Limits to Growth' which brought to the attention of Western bourgeois society the irreconcilability of infinite economic growth within a planetary system with finite resources.

**Duodji:** Sámi term for handicrafts. It is considered to be a branch of Sámi culture to have endured in such forms as knife making, bowl carving and traditional dress tailoring. It typically combines the useful with the aesthetic.

**Entropy:** a term originating in the field of thermodynamics referring to the amount of dissipated energy within a system, meaning that it can no longer be used to do work. Within ecological economics the thermodynamic entropy law, stating that energy

always tends towards a thermal equilibrium, from highly ordered towards less ordered states, has been interpreted to imply that economic growth tends towards the transformation of energy from a useful state into a dissipated state, and of resources from a useful state into a state of waste or pollution. This means that a growth-based industrial regime can only reproduce itself by extracting ever more low-entropy energetic input and useful resources from its environment whilst dissipating energy and turning useful matter into waste and pollution, increasing the disorder within the planetary system and eventually exceeding the capacity of the environment to feed the industrial metabolism.

**Fetishism:** a cultural attribution of agency or inherent powers to inanimate objects. The word comes from the Portuguese idiom *feitiço*, meaning ‘spell’ or ‘charm.’ Historically, Portuguese merchants used the word to describe religious practices among peoples with whom they traded along the west coast of Africa in the 15th century. Karl Marx later applied the concept to the modern understanding of commodities under capitalist relations of production. Marx argued that the human labor invested in commodities tends to be ignored once they start to circulate on the market. In effect, people tend to ascribe autonomous properties or powers to commodified objects, rather than acknowledging the human labor and social relations necessary for their production. Alf Hornborg later developed the concept by applying it to the modern conception of the machine, i.e., “machine fetishism.” [This lemma is copied with permission from Roos’ (2021) thesis.]

**FSC:** the Forest Stewardship Council is an international timber products certification organization that claims to advance responsible forest management across the globe. Due to the label contributing to green-washing, several NGO’s have withdrawn their support of FSC. Although FSC, whose guidelines are legally non-binding, has included within their policy the principle of free, prior and informed consent in relation to indigenous people, FSC-certified forestry companies across the globe have found ways to circumvent consent from the peoples whose territories they deforest. On Swedish territory, FSC-labelling recommends a mere 5% of trees to remain standing after logging a forest. Major Swedish clear-cutting forestry enterprises Sveaskog and SCA are FSC-certified.

**GDP:** Gross Domestic Product. GDP is the total monetary value of the goods and services produced within a State during a specific period of time, usually a year, irrespective of the nature of those

goods and services. GDP is used throughout the capitalist world-system as the main measure of economic activity and societal welfare, regardless of the material and mental conditions of life that remain hidden behind an undifferentiated quantification that is blind to social inequalities, dispossession and the environmental consequences of GDP-boosting economic activities.

**Goahti:** traditional pyramid shaped Sámi dwelling, either as a solid structure constructed out of timber or turf, or as a portable teepee-like tent (called *lavvu*).

**Goavddis:** ceremonial Sámi drum, usually carved out of a large tree knurr and clad with a decorated reindeer skin. These drums were used to accompany or induce the *noaidi*’s trance and divination practices. Seen as devilish instruments, they were targeted by the Church. An estimated 70 *goavddis* survived the Church’ destructive rage, but most of them are kept as curiosities outside of Sápmi.

**Hothouse Earth:** a term used to denote the condition in which the earth system has tipped into a cascade of positive feedback loops reinforcing global warming regardless of reductions in anthropogenic greenhouse gas emissions. A Hothouse Earth scenario would render impossible a recovery of Holocene stability and pose severe risks for the habitability of the planet for numerous life forms, including the human species. It is estimated that a threshold for tipping into a Hothouse Earth scenario lies around 2°C increase of global temperatures compared to pre-industrial levels, meaning that a Hothouse Earth trajectory is the one we are currently approaching.

**ILO 169:** the Indigenous and Tribal Peoples Convention of the International Labour Organization (a United Nations agency) that is supposed to safeguard indigenous and tribal people from assimilation and discrimination and guarantee free, prior and informed consent from those people in matters of resource exploitation and development. The convention has been in force since 1991; Sweden still refuses to ratify it.

**Laponian Area:** Unesco World Heritage Site covering about 9400 square kilometers of mountains, fells, valleys, lakes and forests. Since 1996 the area has been deemed worthy of protection for its outstanding universal value, both in terms of natural history and cultural history, central to which is the reindeer ecology and economy. Several of the Sámi reindeer herding communities whose reindeer browse the fells of Lapponia would to varying degrees be impacted by a mine in Gállok. Unesco itself estimates the impact to be large to very large.

**Lapp-shall-remain-Lapp policy:** a segregationist policy by the Swedish State aimed at both resolving land use issues between reindeer herding and farming and preserving the essence of the Sámi reindeer herders' culture whilst assimilating all other Sámi. The policy was enacted in a climate of scientific racism and served to counterbalance the assimilationist policy to which the Sámi population had thus far been subjected, and to which all Sámi who were not categorized as reindeer herders continued to be subjected. In so doing, the Swedish State established a cleavage between what were to be exotic reindeer herding Sámi with special rights and assimilated Sámi supposed to become Swedes.

**Lichen:** composite organisms consisting of a mutualistic symbiosis of fungi and algae or cyanobacteria. The various lichen species are an essential part of the reindeer's diet, especially in winter when other food sources are scarce. An important species is the so-called reindeer lichen (*Cladonia rangiferina*). When thaw is followed by frost and a cover of snow thus transformed into a sheet of ice, the reindeer's browsing of lichen is impeded. Also epiphytic lichen species (growing on other plants, in this case on old trees), such as witches' hair lichen (*Alectoria sarmentosa*), are important food sources for reindeer but becoming ever scarcer due to the logging of old trees and the plantation of alien lodgepole pines that are bereft of indigenous lichen species.

**Luddites:** members of a social movement consisting of rural artisans, primarily hand loom weavers, that engaged in direct actions such as sabotage and property destruction in early 19th century England. They perceived the introduction of industrial machinery to jeopardize their livelihoods and independence as industrialization pushed skilled artisans into pauperism and alienation. The movement was suppressed by massive State repression, involving the mobilization of up to 12 000 military men.

**Mission civilisatrice:** French for 'civilizing mission'. Though coined in the context of French colonialism, the term generically refers to the belief that modern Europeans are called upon to go out and civilize people across the globe that live under conditions that do not correspond to the ethnocentric ideal of modern, civilized existence. It is a way of legitimizing acts of imperialism by making them look like selfless acts of benevolence. Related notions are the idea of the White Man's Burden as expressed by British poet Rudyard Kipling and the idea of Manifest Destiny underpinning the genocidal expansion of the USA.

**Mycorrhizal fungi:** fungi that live in symbiotic association with plants. The symbiosis is usually mutualistic (mutually beneficial) and consists of an exchange of nutrients: the sugary products of the plants' photosynthesis are made available to the fungi through the plants' roots that have been penetrated by the fungi's hyphae, offering minerals and water extracted from the soil in return. These associations are of crucial importance for nutrient cycles in woodland ecosystems. Clear-cutting fatally disrupts the integrity of these nutrient cycles, killing not only the trees, but also fungi, and basically the forest ecosystem as such.

**Noaidi:** usually referred to as the Sámi equivalent of the shaman. 'Shaman' itself is derivative of a Tungusic Siberian term meaning 'to know'. The figure of the Siberian shaman has been extrapolated by anthropologists to denote people with similar roles throughout different cultures across the world. The Sámi *noaidi* display features that are indeed akin to their circumpolar shamanic counterparts, including access to arcane knowledge by such means as drumming-accompanied trance, otherworldly journeys and shape-shifting, divination and magic. *Noaidi* are believed to have largely disappeared in the context of forced Christianization, a process in which *noaidi* were persecuted. Yet especially in the northern ranges of Sápmi *noaidi* practices have managed to persist under the radar.

**Pinus contorta:** known as lodgepole pine in English, referring to its use for teepee poles, this pine species is native to the west of so-called North America but often used in Swedish forestry due to its rapid growth properties. Economically, its twisted timber is considered valuable only for pulp production by the industry; ecologically, the monocultures of *contorta* are devoid of biodiversity and unsuitable for browsing reindeer.

**Planetary boundaries:** a framework developed by a group of natural scientists to demarcate the limits to human impact on the earth system. Transgressing these boundaries would push the earth system beyond its self-regulatory Holocene functions, triggering non-linear, abrupt environmental change. The framework consists of nine boundaries, including climate change, erosion of biosphere integrity (loss of biodiversity), ocean acidification, introduction of novel entities in the environment (chemical pollution) and global freshwater use.

**Progress:** the belief that humanity necessarily develops along a linear trajectory towards ever greater levels of achievement and perfection by

means of rationalism, technological improvement and economic growth. Note that questioning this belief is not the same as turning it around in an equally linear view of generalized regression.

**Racial biology:** also known as scientific racism, this discipline makes use of the epistemology and methodology of science to establish a classification of human individuals into distinct races. The origin of this discipline, which is nowadays considered pseudo-scientific, lies within a pre-established belief in hierarchically ordered human races that had already been reified within the institutions of colonialism and slavery. As such, serving as an ideological buttress of pre-existing racist institutions, racial biology illustrates how the epistemological authority of Science can serve authoritarian claims to truth as well as authoritarian politics.

**Sameby:** literally ‘Sámi village’ in Swedish, a *sameby* is essentially a legal category within Swedish law to denote a community of reindeer herders with land use rights to a certain area. As such, it should not be understood to mean a village in the usual sense of a clustered settlement. Note that throughout this publication ‘*sameby*’, ‘Sámi village’, ‘Sámi community’ and ‘Sámi reindeer herding community’ are used interchangeably, depending on the choice of words of the speaker. Although in their current legal form *samebyn* date back to the first Reindeer Grazing Act of 1886, they are based on actual communities dating way farther back in time called *siida* or *tjiellde*. There are 51 *samebyn* on Swedish territory, holding the unique right to reindeer pastoralism.

**SCA:** Svenska Cellulosa AB is a multimillionaire Swedish forestry company. Owing 2.6 million hectares of forest on Swedish territory plus properties in the Baltic states, SCA is Europe’s largest private forest owner. FSC-labelling notwithstanding, SCA is committed to clear-felling forestry methods, systematically wiping out the habitat of red-listed species and destroying reindeer grazing grounds.

**Social metabolism:** the flow, or throughput, of energy and materials of a given society. When the throughput exceeds the ecological basis, the problem of ecological overshoot occurs. The social metabolism of the capitalist world-system is such that wealthy core regions’ energy and material

consumption depends on the depletion of resources from peripheral areas within a system that as a whole greatly surpasses the ecological boundaries of the worlds’ ecosystems and resources. It is thus unsustainable and bound to collapse.

**Sveaskog AB:** formerly called Domänverket, Sveaskog is Sweden’s State-owned forestry company and the largest forest owner on Swedish territory. Like other large forestry companies, they are committed to clear-felling forestry methods and systematically disregard the principle of free, prior and informed consent from the indigenous Sámi population. Their profit-oriented agenda is applied not only to ruthless clear-felling but also to their hunting policy, which targets pregnant elk cows and capitalizes on hunting tourism.

**Tailing dam:** a dam that is constructed with the purpose of long-term containment of the byproducts of mining operations after the valuable ore has been separated from the useless debris or gangue. The substance contained by tailing dams is usually highly toxic, including heavy metals or radioactive particles. It lies in the nature of tailing dams to leak. Outright dam bursts are recurrent throughout the world, releasing a massive stream of toxic sludge.

**Terra nullius:** Latin term for ‘no man’s land’, meaning that the area in question has not yet been claimed by an acknowledged State entity to incorporate it within its dominion.

**Yoiking:** the Sámi people’s way of chanting. A mountain can be yoiked or a reindeer, a river or a human person. Verging on or surpassing the boundary between the descriptive and the evocative, yoiking can be seen as performative in a metaphysical rather than a consumerist way. Yet to confine yoiking to the discrete field of religion would be a mistake rooted in missionary prejudice against a practice that was detested and persecuted as the Christian religion was imposed upon the Sámi. Nowadays an eclectic merging of yoiking and ecclesiastical music exists, and yoiking is also integrated in popular music genres.

# ACKNOWLEDGMENTS

We would like to thank all participants to this publication who have shared with us their time and perspectives, all the more so given the fact that many of them are already overburdened by journalists and researchers, repeatedly saying the same things while repeatedly seeing the same problems reproduced. Special thanks to Tor Tuorda, Henrik Andersson and everyone else who has facilitated the journey and gathering in Gállok in 2021. Thanks also to all who have contributed indirectly to this publication by reviewing and commenting, and in ways too indirect and manifold to mention individually.

To conclude we would like to acknowledge all those people past and present who remind us, in these times of crisis, confusion, hypocrisy, disavowal, hostility to life and the uneasy marriage between anthropocentrism and undifferentiated misanthropy, that it is not the human genus as such that is a scourge upon this planet. We especially acknowledge in this context those who have resisted assimilation to this singular humanity that insists on walking astray on a straight but aimless path.







# LITERATURE

Below follows a list of literature in the English language that has been consulted for the booklet and/or can be recommended for further reading. A special mention goes to Gabriel Kuhn's 'Liberating Sápmi: Indigenous Resistance in Europe's Far North' (2020), which contains a more extensive overview of English language resources, and to the anthology called 'RE: Mindings: Co-Constituting Indigenous / Academic / Artistic Knowledges' (2014) co-edited by May-Britt Öhman. It includes contributions by Öhman, Tuorda, Helsdotter and Stefan Mikaelsson. It is freely accessible online: <https://www.diva-portal.org/smash/get/diva2:1317980/FULLTEXT01.pdf>.

## Freely accessible academic publications in English

Bjork C. and Buhre F., 'Braiding Time: Sami Temporalities for Indigenous Justice', *Rhetoric Society Quarterly*, Vol. 51, pp. 227-236, 2021

Dunlap A., 'Spreading "green" infrastructural harm: mapping conflicts and socio-ecological disruptions within the European Union's transnational energy grid', *Globalizations*, 2021

Forsell H., 'Modernizing the Economic Landscapes of the North: Resource Extraction, Town Building and Educational Reform in the Process of Internal Colonization in Swedish Norrbotten', *International Journal for History, Culture and Modernity*, 2015.

Gaski H., 'The Sami People: The "White Indians" of Scandinavia', *American Indian Research Journal*, 1993

Holm S.-O., 'A management Strategy for Multiple Ecosystem Services in Boreal Forests', *Journal of Sustainable Forestry*, Vol. 34, pp. 358-379, 2015

Gamfeldt L. et al., 'Higher levels of multiple ecosystem services are found in forests with more tree species', *Nature Communications*, 4, 2013

Josefsen E., Mörkenstam U. and Nilsson R., 'The Nordic Sámediggi and the Limits of Indigenous Self-Determination', *Gáldu Čála*, 2016

Knoblock I., 'Writing-Weaving Sámi Feminisms: Stories and Conversations', Lund University, 2022

- Ojala C., 'Sámi Prehistories: The Politics of Archaeology and Identity in Northernmost Europe', Uppsala University, 2009
- Ojala C. and Nordin J., 'Mining Sápmi: Colonial Histories, Sámi Archaeology, and the Exploitation of Natural Resources in Northern Sweden', *Arctic Anthropology*, Vol. 52, No. 2, pp. 6–21, 2015
- Östlund L. et al., 'The war on deciduous forest: Large-scale herbicide treatment in the Swedish boreal forest 1948 to 1984', *Ambio*, Vol. 51, pp. 1352–1366, 2022
- Lawrence, R. & Larsen, R.K., 2017, 'The politics of planning: assessing the impacts of mining on Sami lands', *Third World Quarterly*, Vol. 38, no. 5, pp. 1164-1180, 2017
- Lutz, K.C.S., 'Demographic scenarios by age, sex and education corresponding to the SSP narratives', *Population and Environment*, Vol. 35 (3), pp. 243-260, 2014
- Milleward-Hopkins, J., 'Providing decent living with minimum energy: A global scenario', *Global Environmental Change*, Vol. 65, 2020
- Naudts, K., et al., 'Europe's forest management did not mitigate climate warming', *Science*, 351, Issue 6273, pp. 597-600, 2016
- Rockstöm J. et al., 'A safe operating space for humanity', *Nature*, Vol. 461, 2009
- Roos A., 'Renewing power: Including global asymmetries within the system boundaries of solar photovoltaic technology', Lund University, 2021
- Saglie J., Mörkenstam U. and Bergh J., 'Political Cleavages in Indigenous Representation: The Case of the Norwegian and Swedish Sámediggi', *Nationalism and Ethnic Politics*, 26:2, 105-125, 2020
- Schmithüsen F., 'Three hundred years of applied sustainability in forestry', *Unasylva*, Vol. 64, pp. 3-11, 2013
- Steffen W. et al., 'Trajectories of the Earth System in the Anthropocene', *PNAS*, Vol. 115, no. 33, 2018
- Sterkenburg et al., 'The significance of retention trees for survival of ectomycorrhizal fungi in clear-cut Scots pine forest', *Journal of Applied Ecology*, 2018

## **Books and book chapters in English**

- Fur G., 'Colonialism in the Margins: Cultural Encounters in New Sweden and Lapland', 2006
- Fur G., 'Colonialism and Swedish History: Unthinkable Connections?' in Naum M. and Nordin J., *Scandinavian Colonialism and the Rise of Modernity: Small Time Agents in a Global Arena*, 2013.
- Guttorm G. et al. (ed.), 'Let the River Flow: An Eco-Indigenous Uprising and Its Legacies in Art and Politics', 2021
- Hirvonen V., 'Voices from Sápmi: Sámi Women's Path to Authorship', 2008
- Krenak A., 'Ideas to Postpone the End of the World', 2020
- Lauesen T., 'Riding the Wave: Sweden's Integration into the Imperialist World System', 2021
- Tainter J., 'The Collapse of Complex Societies', 1988

## **Books in Swedish**

- Hornborg A., 'Kannibalernas Maskerad: pengar, teknik och global rättvisa i antropocen', 2021
- Müller A., 'Norrlandsparadoxen', 2015

# IMAGES & POETRY

Below follows a list with information about some of the artwork, photographs and poems in the booklet. The number at the beginning of each sentence indicates the number of the page where you find the image.

## Introduction

Cover (front and back): “The Green Transition” (by KF Svarta Katten Umeå and Enni)

4. “We loooove mines – Viktig-Petter Snoralltsson” (by Enni)  
Karl-Petter Thorwaldsson (Former Minister for Business, Industry and Innovation in Sweden) here re-written to “Important-Petter Steal-everything-son” known for his announcement that the Social Democrats “loooove mines” when granting Beowulf Mining permission to start a mine in Gállok.
7. “Reindeer” (by Enni)

## Gállok

8. View from Gállok (from ÄDNO/ÄLVEN/THE RIVER by Mia Rogersdotter Gran)
10. Famous Rapa Valley in Sarek National Park (not so far away from Gállok)
15. The first tower in Gállok 2013
16. Lars Guttorm performing a yoik (up left corner)
17. Excerpt from “What local people?” (poetry slam by Timimie Mäarak performed in Gállok 2013)  
Translated by Ina Knobblock
18. 85 year old reindeer herder doing a sitting blockade in Gállok 2013 (bottom picture)
20. “Portrait of Tor L. Tuorda” (by KF Svarta Katten Umeå)
22. Traditional Sámi hand drum
24. “Portrait of Juhán Niila Stålka” (by KF Svarta Katten Umeå)
25. “Mountains and a red sun” (by Enni)
27. “Portrait of Johanna Lindberg” (by Enni)

## Sápmi under Swedish colonialism

30. “Kolt” (by Enni)
31. Police standing on the Sápmi flag in Gállok 2013
36. A finger against the windturbines by a clear-cut in Västerbottens inland (by Sandor Lindström)
39. “The coat of arms of Stockholm fishing in a mine” (by Enni)
40. “Portrait of Henrik Andersson” (by Enni)
43. “Henrik Anderssons reindeers in a corral” (by Boryana Maneva)
50. “Portrait of May-Britt Öhman” (by Moa Edvinsson)
58. “Portrait of Sandor Lindström” (by Enni)

59. "Portrait of Daniel Barruk" (by KF Svarta Katten Umeå)
61. "Sami Parliament" (taken from "The Gállok Rebellion" documentary)

### **Ecocide in Swedish-occupied Sápmi**

64. (1) Clearcut in Gállok (by Tor Tuorda).  
 (2) Reindeers and girl in a gravel pit (by Tor Tuorda).  
 (3) Hydrogen power dam close to Jokkmokk (graffiti on the white house to the right saying "Green colonialism is still colonialism")
65. (1) Aitik mine.  
 (2) SCA factory in Sundsvall.  
 (3) Clearcut and windmills. (by Sandor Lindström)
67. "Defend the sacred" An old pine in Norrbotten (by Enni)
68. "Portrait of Eva-Charlotta Helsdotter" (by Enni)
- 74-75. "Extra pipe / leakage water / dam 4. " Toxic waste water from the Kristineberg Mine (by Sandor Lindström)
77. "Poisoned mineds" (by Enni)
78. "Tree stump" (by Enni)
79. "Portrait of Stig-Olof Holm" (by Enni)
82. "White-backed wood pecker with balaclava" (by Enni)

### **Sápmi in the modern world-system**

86. "The Aitik mine" (by The Trans Experience/Pietro Wikström)
88. "Portrait of Andreas Roos" (by Enni)
100. "Portrait of Alf Hornborg" (by KF Svarta Katten Umeå)

### **Concluding remarks etc.**

110. "Goahti": a traditional Sámi birch bark goahti (by Boryana Maneva)
118. People sitting around a fire on the banks of Bárgávrrre at the gathering in Gállok 2021 (by Anonymous)
119. "Activists in one of the towers", Gállok occupation 2013 (taken from Gallok Rebellion documentary)
124. "Fuck U Beowulf Mining", Demonstration in Stockholm "Fast mark och rent vatten" (Solid land and clean water)
125. "We were a Wind" (poem by Nils-Aslak Valkeapää, translated from northern Sámi by Harald Gaski, Lars Nordström and Ralph Salisbury)

# KOLONIERNA.SE



Kolonierna is a loose network of people who want to decolonize the world. We do that by organizing gatherings and camps, spread information and support direct action. Kolonierna does not have an ideology or action consensus you have to follow. We support all forms of anti-colonial grass root struggles and believe in a resistance that uses a diversity of methods. We will simply try and see what works.

## Contact us

Would you like to support environmental struggles in the Swedish colonies in any way? Or do you need support where you live? We are happy to hear from you. Feel welcome to contact us on [kolonierna@riseup.net](mailto:kolonierna@riseup.net)

## Download this booklet for free

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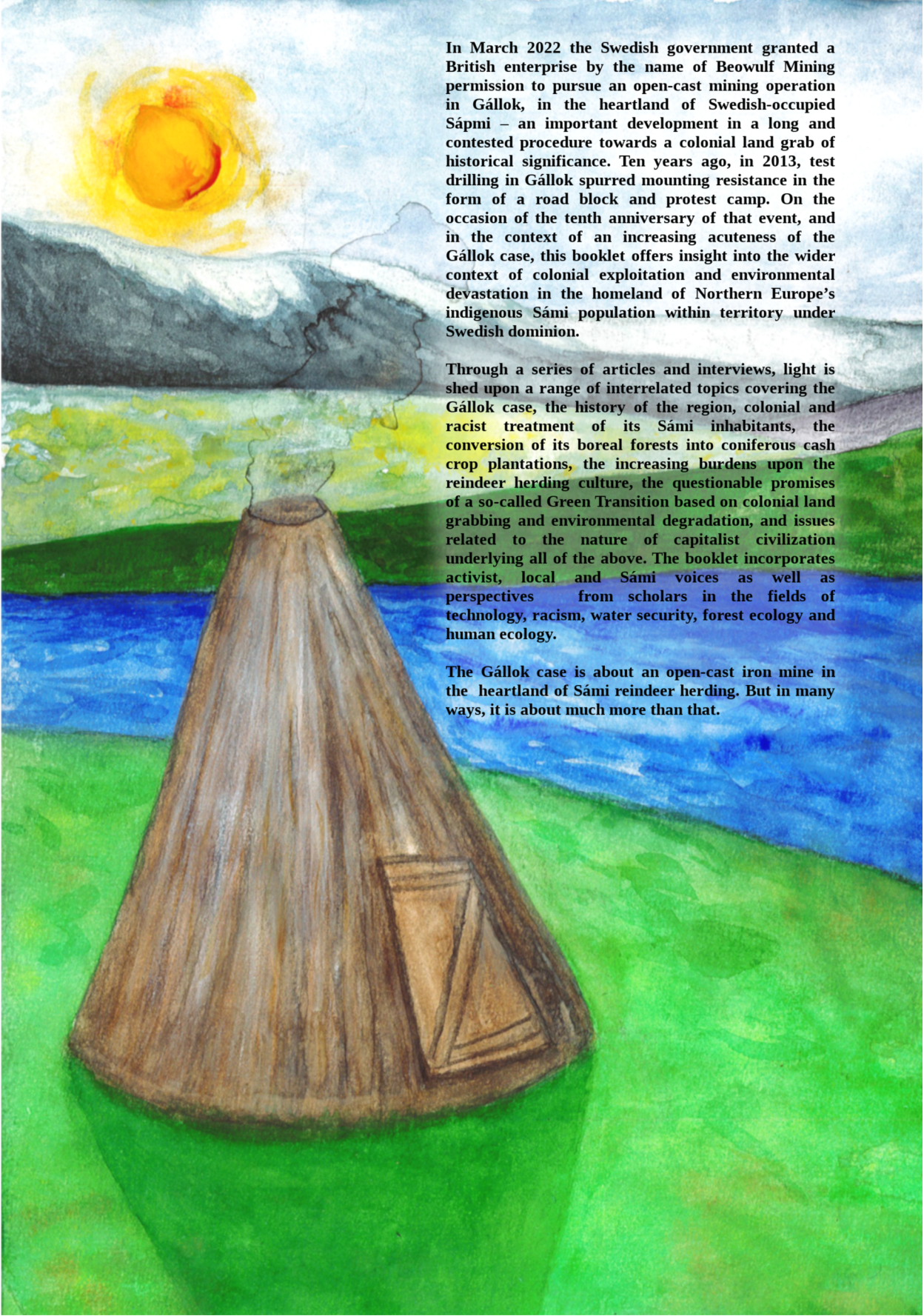
*Greedy and grim, no golden rings  
he gives for his pride; the promised future  
forgets he and spurns, with all God has sent him,  
Wonder-Wielder, of wealth and fame.  
Yet in the end it ever comes  
that the frame of the body fragile yields,  
fated falls; and there follows another  
who joyously the jewels divides,  
the royal riches, nor recks of his forebear.  
Ban, then, such baleful thoughts, Beowulf dearest,  
best of men, and the better part choose,  
profit eternal; and temper thy pride,  
warrior famous! The flower of thy might  
lasts now a while: but erelong it shall be  
that sickness or sword thy strength shall minish,  
or fang of fire, or flooding billow,  
or bite of blade, or brandished spear,  
or odious age; or the eyes' clear beam  
wax dull and darken: Death even thee  
in haste shall o'erwhelm, thou hero of war!  
gives for his pride; the promised future  
forgets he and spurns, with all God has sent him,  
Wonder-Wielder, of wealth and fame.  
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or bite of blade, or brandished spear,  
or odious age; or the eyes' clear beam  
wax dull and darken: Death even thee  
in haste shall o'erwhelm, thou hero of war!*

Anonymous, 'Beowulf', XXV (Old English epic poem translated by Francis Barton Gummere)



Wind  
we were a wind  
life's singing wind  
caressing the cheeks  
of the tundra  
the forest, the valleys  
a disappearing yoik  
the reds of evening, wind  
we were a wind  
we came and left  
and nothing remained of us  
but a yoik in the singing wind  
a dream about being

~Nils-Aslak Valkeapää



In March 2022 the Swedish government granted a British enterprise by the name of Beowulf Mining permission to pursue an open-cast mining operation in Gállok, in the heartland of Swedish-occupied Sápmi – an important development in a long and contested procedure towards a colonial land grab of historical significance. Ten years ago, in 2013, test drilling in Gállok spurred mounting resistance in the form of a road block and protest camp. On the occasion of the tenth anniversary of that event, and in the context of an increasing acuteness of the Gállok case, this booklet offers insight into the wider context of colonial exploitation and environmental devastation in the homeland of Northern Europe's indigenous Sámi population within territory under Swedish dominion.

Through a series of articles and interviews, light is shed upon a range of interrelated topics covering the Gállok case, the history of the region, colonial and racist treatment of its Sámi inhabitants, the conversion of its boreal forests into coniferous cash crop plantations, the increasing burdens upon the reindeer herding culture, the questionable promises of a so-called Green Transition based on colonial land grabbing and environmental degradation, and issues related to the nature of capitalist civilization underlying all of the above. The booklet incorporates activist, local and Sámi voices as well as perspectives from scholars in the fields of technology, racism, water security, forest ecology and human ecology.

The Gállok case is about an open-cast iron mine in the heartland of Sámi reindeer herding. But in many ways, it is about much more than that.