

Nanna Elvin Hansen



Groundings

OVERGADEN NEDEN

O – OVERGADEN
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INTRODUCTION

Det er en stor fornøjelse at introducere denne publikation, der udkommer i forbindelse med Nanna Elvin Hansens soloudstilling på O – Overgaden. Siden 2021 har O – Overgaden med støtte fra Augustinus Fonden produceret en monografisk serie af publikationer, der udgives i forbindelse med kunsthallens større soloudstillinger. Publikationernes målsætning er at udvide samtalerne under og efter udstillingerne og åbne op for, at nyt materiale kan udspringe heraf. I dette tilfælde har vi været heldige at få bidragsyderne Kate Johanne Utsi, Marianne Lien og Godofredo Pereira ombord, og vi er meget taknemmelig for alle tre bidrag. Dertil skal der lyde en stor tak til O – Overgadens egen redaktør Nanna Friis og til det grafiske designteam på fanfare for deres altid store arbejde. Sidst, men ikke mindst, en særligt varm tak til kunstneren for at dele sit materiale – fra koncept til udvidede samtaler – med os alle sammen, både gennem udstillingen og denne publikation.

Nanna Elvin Hansen arbejder i gråzonen mellem kunst, research og græsrodsaktivisme. Hendes film- og lydværker – som typisk skabes i kollektive konstellationer – peger på, hvordan strukturel ulighed og historiske magtforhold stadig i dag har konsekvenser for menneskerettigheder, materialeudvinding og menneskelig såvel som ikke-menneskelig migration.

Til sin soloudstilling på O – Overgaden, som er Hansens første store institutionelle præsentation, har hun skabt den omfattende nye film- og lydinstallation *Groundings* i samarbejde med bl.a. lydkunstner Eliza Božek. Hansens projekt er baseret på længerevarende research omkring kvartsitminen ved bjerget Giemaš i samisk Nordnorge og borer sig ind i spørgsmålet om, hvilke menneskeskabte systemer der kontrollerer jordens ressourcer i dag: Hvordan den teknologiske udvikling bestandigt øger kortlægningen, analysen, udvindingen af og profitten på jordens råstoffer og undergrund – heraf *Groundings* – samt ikke mindst, hvordan et kernemateriale bag denne magt- og geopolitiske udvikling ofte er netop jordens råstoffer (tænk blot på chippen i din smartphone).

Helt konkret starter Hansens undersøgelse i de optiske spejle (også kaldet SiC-optikker), der bruges i det net af satellitter, som overflyver jorden dagligt. I den filmiske prolog, skabt sammen med datatekniker Halfdan Mouritzen, som vises på et større bord i udstillingens første rum, følger vi kunstneren navigere gennem satellitbilleder filmet med denne optikteknologi – en slags ekstremt optimerede 'øjne' – der muliggør,

at man på enorme afstande kan 'se', overvåge eller fjernregistrere alt fra jordlag og landmasser til migration. Konkret er de optiske spejle skabt af det ekstremt hårde materiale siliciumkarbid, der også bl.a. bruges som varmeskjold på rumraketter. Via satellitindustriens højteknologiske produktionskæder forfølger Hansen siliciumkarbid-spejlene til deres grundbestanddel: stenen kvartsit (kunstneren forsøgte faktisk at få tilladelse fra forskellige producenter til at filme selve tilblivelsen af de optiske spejle, men blev afvist). Det viser sig, at en af verdens største kvartsitminer, der udvinder ca. 850.000 megaton årligt fra bjerget Giemaš, ligger i et tidligere dansk kontrolleret område: samisk Nordnorge ved den affolkede bygd Austertana tæt på den russiske og finske grænse. Og det viser sig, at den største aktieindehaver bag udvindingsfirmaet er China National BlueStar, som aktuelt planlægger at udvide minen til seks gange dens nuværende størrelse. Kort sagt: stenbruddet kontrolleres af en kinesisk investor i et geopolitisk minefelt, ikke mindst fordi den lokale, samiske urbefolkning delvist stadig lever af rensdyrdrift i området.

I udstillingens hovedrum er kvartsitstenen det tilbagevendende omdrejningspunkt for en altopslugende lyd- og filmcollage. Med stenen som et materielt eller tingsmæssigt vidne tages den besøgende med gennem udvindingens cyklus fra kvartsit til siliciumkarbid og de optiske spejle. Vi følger en sejltur rundt om bjerget Giemaš og videre ind i stenbruddet (på skærmen til højre), en droneoverflyvning af lokale rensdyrspor, hvor mineselskabet pt. ønsker at udvide udvindingen (stor skærm på gulv) og et close-up af kunstneren og Božeks hænder, som sorterer kvartsit, siliciumkarbid og optiske spejle (mindre skærm til venstre).

Hansen frembringer således, via stenen, et materialemæssigt tværsnit gennem den globalt kontrollerede jord- og minedrift, økonomisk gevinst og en øget industri af transnational (satellit) overvågning samt relaterede spørgsmål om konsekvenserne for en lokal økologi og urbefolkning. Materialet – kvartsiten – bliver et startpunkt for en lige delt graverjournalistisk og poetisk rejse ind i diskussionen om, hvad denne sten kan bevidne af geopolitisk (rov)drift på jorden. Udstillingen stiller således spørgsmål ved, hvem – menneske eller ej – der får lov til at stille politiske krav og bestemme over et landskab?

Rhea Dall,
Leder, juni 2023

FORSTYR- RELSER

AFFEKTIVE FREMTIDER OG UFORKLARLIGE
TILSTEDEVÆRELSER I GIEMAŠ, FINNMARK

Marianne Lien

Jeg havde altid lagt mærke til Giemaš-bjergets lagdeling, måden det hælder på i aftensoen som en opretstående sandwich, som om det svajer, falder og på et tidspunkt er frosset. Men jeg havde aldrig rigtig set østsiden af bjergskrånningen, det sandfarvede vejnet, der gnaver sig ind i bjerget, før den sommer. Ingen havde fortalt mig det, og jeg tror aldrig, jeg havde spurgt. Bjerget er nemt at huske, dets stejle lagdeling skiller sig ud i landskabet, når man tager vejen fra Deatnu-floden og nordpå over Varanger-halvøen mod Barentshavets norske kyst. Mellem halvøen og en flodstrækning, der ligger brak, markerer bjerget en brat overgang mellem vådområdet mod syd og bjergplateauet mod nord. For nogle er det det eneste velkendte syn langs denne rute, hvor bjerget falder stejlt ned i vandet. For andre er det et levested: eftersom floden snævrer sig ind, er det et oplagt sted at fiske, og man befinder sig i udkanten af et græsningsområde til rensdyrene lige på ruten til deres årstidsbestemte træk. Områdets kvartsitbrud ligger i Juovlavuotna (Austertana på norsk), en bygd med færre end 200 indbyggere i nærheden af Deatnu-floden. Deatnu er både navnet på floden og på den kommune, der omgiver stenbruddet.

Åben minedrift er en hyppigt tilbagevendende kilde til kontroverser både i og uden for Arktis. Arbejdets invasive teknologier ødelægger landskabet og skaber desuden uoprettelige forandringer af specifikke levevilkår i de berørte områder. Som regel udfolder disse kontroverser sig steder, hvor den oprindelige befolknings måder at interagere med naturen i forvejen er under pres. Med begrebet *ekstraktivisme* refererer jeg til processer, hvor store virksomheder udfører omfattende og irreversibel udvinding af ikke-vedvarende energi såsom mineraler, kul eller olie. Ekstraktivisme betegner ikke kun de materielle processer, men også den ideologi og det konceptuelle begrebsapparat, der understøtter denne praksis og som sædvanligvis involverer en naturalisering af ressourcer som værende noget man kan tage og eje.¹

1. Se fx Frida Hastrup & Marianne E. Lien, "Welfare frontiers? Resource practices in the nordic arctic Anthropocene", *Anthropological Journal of European Cultures*, vol. 29, no.1 (2020): v–xxi; Tanya Richardson & Gisa Weszkalnys, "Introduction: Resource materialities", *Anthropological Quarterly*, vol. 87 no.1 (2014): 5–30.

Når jeg forsøger at spore mig ind på den ujævne udfoldelse af en potentiel fremtid, et rygte, en udsigt eller en afbrydelse, er jeg særligt opmærksom på de affektive dimensioner af ressource-ekstraktivisme og selve processens fragmenterede natur, eftersom spørgsmålet spidser til i forhold til en foreslået udvidelse af netop kvartsitbrud på Giemaš-bjerget. Jeg beskæftiger mig med dette stenbrud og de aktuelle kontroverser omkring det som en anledning til at anvende forskellige manifestationer af det såkaldt virkelige.

Der er sen aftensol i øjnene, da jeg nærmer mig Stjernevann – Nástejávri på Sámi – en sø på bjergplateauet lige nord for Juovlavuotna, hvor rensdyr-siidaens* overhoved har slået lejr for sommeren. Der kommer røg ud af hans laavo.* Jeg parkerer bilen og håber at få mulighed for at gennemgå nogle feltnoter fra et tidligere besøg. I august skal kalvene mærkes, inden rensdyrene bevæger sig mod deres efterårsgræsning. Med sine omkring 4000 dyr er siidaen travl i adskillige uger. Dagen forinden overværede jeg afmærkningen af kalvene i rensdyrfolden, men i dag har Frode, min kontaktperson, der netop er færdig med dagens arbejde, mere lyst til at slappe af i solen og holde øje med bålet. "Lad være med at gå ind", siger han, "du kommer til at lugte af røg". Frode lægger pil på bålet, han siger, at det får kødet til at blive rødt. Siger, at det er den samme kalv, som jeg så i går i folden, såret. I morgen kan jeg smage den. Men i dag vil han tale om noget andet. Frode fortæller mig, at han er bekymret, det handler om kvartsitbruddet. Sagen forstyrrer hans nattesøvn, han vågner om natten og spekulerer på, hvad han skal stille op. Mens vi sidder ved lavvoen, får jeg at vide, at der er et kvartsitbrud i Juovlavuotna, at det har ligget der i over 40 år og er ejet af den lokalkendte virksomhed Elkem. Et par år forinden blev Elkem opkøbt af kinesiske investorer, og de nye ejere planlægger at udvide bruddet. De hævder, at kvartsitten, der findes i stenbruddet kun holder et par år mere, så for at sikre stenbruddets kontinuitet er de nødt til at etablere et nyt, stort område til kvartsitudvinding. Med den planlagte udvidelse vil kvartsitbruddet nå helt hen ved siden af området, hvor rensdyrene samles, helt op til det indhegnede område der kaldes 'græsningshaven'. Rensdyrene græsser helst af vilde planter, og de bevæger sig frit det meste af tiden. Græsningshaven er det sted, de er samlet om sommeren, mens kalvene mærkes. Det er et stort område, og det er det nødt til at være, så rensdyrene kan få føde nok til at klare sig, indtil de bevæger sig videre til deres efterårsgræsning og derefter, et par måneder senere, bevæger sig mod det sund, hvor de kan krydse Deatnu-floden og nå deres vinterområde længere mod syd.

Da jeg kører tilbage fra søen, genkalder jeg mig brudstykker af andre samtaler, hvor det samme kvartsitbrud er kommet op: en episode i 1973, hvor man skød dynamit af i nærheden af Giemaš. En kæmpe sten rev sig løs og begravede knusningsanlæggets fundament. De ældre mente, at man aldrig skulle have gjort det så tæt på siida.*

En anden gang kom jeg forbi Juovlavuotna med en ven fra kysten, vi kørte så langt vi kunne i retning af stenbruddet. Få minutters gang fra den nærmeste parkeringsplads kunne vi gå på opdagelse i den kæmpemæssige, udhulede mineskakt – som hvis en enorm skabning havde taget en bid af landskabet. Vi nærstuderede det tunge maskineri i tomgang, og grusvejene der krydsede frem og tilbage over størstedelen af den østvendte bjergskrånning. Dette var altså et kvartsitbrud: nærmest usynligt for dem, der bliver på hovedvejen, og meget større end vi troede. Et par dage forinden havde min ven fortalt om en ulykke, hun havde hørt om, hvor en stor kampesten havde løst sig og var faldet i vandet. Hun hørte om det, fordi en ældre samisk mand havde forudset, at det ville ske. Men hun vidste ikke meget om det, og foreslog, at jeg talte med nogle andre – måske rensdyrhyrderne vidste noget? Disse samtaler blev mine første møder med regionen, der både opfattede siidaen som en relationel nutidskraft og som en enhed med en agens, der potentielt kunne gribe ind i begivenhedernes gang. Siidaen er velkendte figurer i samisk religion. De er kendt som en slags samiske offersten og findes mange steder i det nordlige Skandinavien. Mange er glemt, men nogle består som levn fra en tid, hvor jorden var i live og besad kræfter, der overskred ontologiske antagelser om 'det virkelige' i den gængse, offentlige forstand. Selvom stenene som regel klassificeres som 'kulturarv', er de mere end fortidsrelikvier.

Varanger-halvøen har ikke mange fællestræk med de Andes-verdener, der beskrives i redegørelser for kosmologier relateret til andet-end-menneskelige arter, som minekontroverserne puster liv i – f.eks. dem der beskrives af de la Cadena (2015) og Li (2015).² Ikke desto mindre er associationen mellem hellige sten og urbefolkninger ganske potent. Når tilsyneladende ubevægelige materialer tilskrives agens, er det ikke nogen bagatel.³ Som Kristina Lyons minder os om, har dette været "the grounds on which to dehumanize colonized and enslaved peoples for their so-called pre-modern mentalities".⁴ Mine kontaktpersoner i Nordnorge er temmelig påpasselige med at bevæge sig i retning af overtro, og det er jeg også. I en 'moderne' opfattelse af verden, er der indlejret en overbevisning om, at materialer grundlæggende er ubevægelige og livløse, og enhver antydning af, at det skulle forholde sig anderledes, er 'myter' eller 'overtro'. Den fremherskende diskurs i Norge informeres af en relativt sekulær udgave af kristendom.

2. De la Cadena, M. (2015). *Earth Beings. Ecologies of Practice across Andean Worlds*. Durham: Duke University Press. Li, F. (2015). Divergent worlds. mines, aquifers and sacred mountains in Peru. *Anthropologica*, 55(2), 399–411.

3. Elizabeth Povinelli, "Do rocks listen? The cultural politics of Apprehending Australian Aboriginal Labor", *American Anthropologist*, vol. 97 no. 3 (1995): 505–518.

4. Kristina M. Lyons, *Vital Decomposition* (Durham: Duke University Press, 2020), p. 42).

Norges luthersk-protestantiske kirke indeholder få og simple ritualer og lægger vægt på en individualiseret, personlig tro på Jesus. Derfor lærer nordmænd at sætte pris på deres miljø og omgivelser gennem den videnskabelige realisme metafysik. Gennem uddannelse og offentlig debat har dette indflydelse på både den samiske og den norske befolkning, men konsekvenserne er formentlig forskellige for de to befolkningsgrupper på grund af den lange og dystre historie om samisk assimilering – og måden hvorpå netop assimileringspolitikken i Sápmi var særligt brutal over for samisk tro og religiøs praksis.

Anerkendelsen af samerne som en urbefolkning og grundlæggelsen af et samisk parlament i 1989 var en sen respons på et århundrede med norsk kolonisering af det samiske samfund. Revitaliseringen af etnisk samisk identitet og sprog har gjort det nemmere for den yngre generation at identificere sig som samisk, men det har ikke nødvendigvis udfordret den moderne, sekulære fornuftslogik dominans – særligt ikke i den offentlige diskurs. Derimod kan man argumentere for, at den politiske indsats, der lagde en dæmper på den allermest intensive assimilering, baserede sig på en ide om "equality as sameness"⁵ ved hjælp af dikotomisering og komplementarisering af etniske symboler.⁶ Den samiske revitalisering blev opnået gennem etableringen af adskillige institutioner, der mimer den norske stat (et samisk parlament, en samisk nationaldag, et samisk flag og lignende), men man satte sjældent spørgsmålstegn ved det sekulære, videnskabelige fundament, som understøtter den norske (og dermed også samiske) politiske diskurs. I stedet for at opbygge ontologiske forskelle – hvad la Cadena og Blaser⁷ (2018) betegner som et "pluriverse" – er de samiske konceptualiseringer og praktiseringer af verden ikke blot blevet ignoreret, men også "made unintelligible and unimaginable as possibly appropriate descriptions of reality".⁸

Den planlagte udvidelse af stenbruddet vil ikke kun forstyrre rensdyrenes græsning. Adskillige andre praksisser og landskaber er i risikozonen, blandt andet Mjelkevæggi, en sø der er rig på arktiske ørreder og undervandsliv i det hele taget. På Frodes opfordring tog jeg kontakt til Yngve, som for nylig havde sagt fra over for Elkem til en offentlig høring, og som havde forberedt en PowerPoint-præsentation med detaljerede udlægninger af adskillige potentielle konsekvenser ved den planlagte udvidelse for de forskellige lokale livsgrundlag. Jeg mødtes med Yngve i hans hus i Lavvonjarg, en lille bygd ved det sund der markerer indgangen til fjorden, hvor kvartsitbruddet ligger.

5. Marianne Gullestad, *The Art of Social Relations* (Oslo: Scandinavian University Press, 1992).

6. Harald Eidheim, *Aspects of the Lappish Minority Situation* (Oslo: Universitetsforlaget, 1972), p. 75).

7. Marisol de la Cadena & Mario Blaser, *A World of Many Worlds* (Durham: Duke University Press, 2018).

8. Liv Østmo & John Law, "Mis/translation, colonialism, and environmental conflict" *Environmental Humanities*, vol. 10 no. 2 (2018): 350.

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Da jeg kører tilbage fra søen, genkalder jeg mig brudstykker af andre samtaler, hvor det samme kvartsitbrud er kommet op: en episode i 1973, hvor man skød dynamit af i nærheden af Giemaš. En kæmpe sten rev sig løs og begravede knusningsanlæggets fundament. De ældre mente, at man aldrig skulle have gjort det så tæt på siida.* En anden gang kom jeg forbi Juovlavuotna med en ven fra kysten, vi kørte så langt vi kunne i retning af stenbruddet. Få minutters gang fra den nærmeste parkeringsplads kunne vi gå på opdagelse i den kæmpemæssige, udhulede mineskakt – som hvis en enorm skabning havde taget en bid af landskabet. Vi nærstuderede det tunge maskineri i tomgang, og grusvejene der krydsede frem og tilbage over størstedelen af den østvendte bjergskråning. Dette var altså et kvartsitbrud: nærmest usynligt for dem, der bliver på hovedvejen, og meget større end vi troede. Et par dage forinden havde min ven fortalt om en ulykke, hun havde hørt om, hvor en stor kampesten havde løsrevet sig og var faldet i vandet. Hun hørte om det, fordi en ældre samisk mand havde forudset, at det ville ske. Men hun vidste ikke

9. Se også Tor A. Benjaminsen, Inger Marie Gaup Eira & Mikkel Nils Sara (red.), *Samisk reindrif: norske myter* (Oslo: Fagbokforlaget, 2016); Mikkel Nils Sara, “Land usage and siida autonomy”, *Arctic Review on Law and Politics*, vol. 3 no. 2 (2011): 158–158.

meget om det, og foreslog, at jeg talte med nogle andre – måske rensdyrhyrderne vidste noget? Disse samtaler blev mine første møder med regionen, der både opfattede siida som en relationel nutidskraft og som en enhed med en agens, der potentielt kunne gribe ind i begivenhedernes gang. Siida er velkendte figurer i samisk religion. De er kendt som en slags samiske offersten og findes mange steder i det nordlige Skandinavien. Mange er glemt, men nogle består som levn fra en tid, hvor jorden var i live og besad kræfter, der overskred ontologiske antagelser om ‘det virkelige’ i den gængse, offentlige forstand. Selvom stenene som regel klassificeres som ‘kulturarv’, er de mere end fortidsrelikvier.

Varanger-halvøen har ikke mange fællestræk med de Andes-verdener, der beskrives i redegørelser for kosmologier relateret til andet-end-menneskelige arter, som minekontroverserne puster liv i – f.eks. dem der beskrives af de la Cadena (2015) og Li (2015).² Ikke desto mindre er associationen mellem hellige sten og urbefolkninger ganske potent. Når tilsyneladende ubevægelige materialer tilskrives agens, er det ikke nogen bagatel.³ Som Kristina Lyons minder os om, har dette været “the grounds on which to dehumanize colonized and enslaved peoples for their so-called pre-modern mentalities”.⁴ Mine kontaktpersoner i Nordnorge er temmelig påpasselige med at bevæge sig i retning af overtro, og det er jeg også. I en ‘moderne’ opfattelse af verden, er der indlejret en overbevisning om, at materialer grundlæggende er ubevægelige og livløse, og enhver antydning af, at det skulle forholde sig anderledes, er ‘myter’ eller ‘overtro’. Den fremherskende diskurs i Norge informeres af en relativt sekulær udgave af kristendom.

Norges luthersk-protestantiske kirke indeholder få og simple ritualer og lægger vægt på en individualiseret, personlig tro på Jesus. Derfor lærer nordmænd at sætte pris på deres miljø og omgivelser gennem den videnskabelige realismes metafysik. Gennem uddannelse og offentlig debat har dette indflydelse på både den samiske og den norske befolkning, men konsekvenserne er formentlig forskellige for de to befolkningsgrupper på grund af den lange og dystre historie om samisk assimilering – og måden hvorpå netop assimileringspolitikken i Sápmi var særligt brutal over for samisk tro og religiøs praksis.

Anerkendelsen af samerne som en urbefolkning og grundlæggelsen af et samisk parlament i 1989 var en

10. Tanya Richardson & Gisa Weszkalnys, “Introduction: Resource materialities” *Anthropological Quarterly*, vol. 87 no. 1 (2014): 6.

11. Hugo Reinert, “About a stone. Some notes on geologic conviviality”, *Environmental Humanities*, vol. 8 no. 1 (2016): 96.

12. Ibid: 97.

13. Britt Kramvig, “Gifts of dreams, connecting to sami epistemic practice”, in Barbara Helen Miller (red.), *Traditional Sami Health and Healing Practices* (Edmonton: Polynny Press, 2015), pp. 183–199.

sen respons på et århundrede med norsk kolonisering af det samiske samfund. Revitaliseringen af etnisk samisk identitet og sprog har gjort det nemmere for den yngre generation at identificere sig som samisk, men det har ikke nødvendigvis udfordret den moderne, sekulære fornuftslogik dominans – særligt ikke i den offentlige diskurs. Derimod kan man argumentere for, at den politiske indsats, der lagde en dæmper på den allermest intensive assimilering, baserede sig på en ide om “equality as sameness”⁵ ved hjælp af dikotomisering og komplementarisering

14. Britt Kramvig & Helen Verran, “Stories, stones, and memories in the land of dormant reciprocity: Opening up Possibilities for Reconciliation with a politics that works tensions of dissensus and consensus with care”, in Jan Erik Henriksen, Ida Hydle og Britt Kramvig (red.) *Recognition, Reconciliation and Restoration: Applying a Decolonized Understanding in Social Work and Healing Processes* (Oslo: Orkana, 2020), 165–182.

* Siida: Ældgammel betegnelse for samisk beboelse/community

* Lavvo: En midlertidig bolig (en form for telt) anvendt af den oprindelige samiske befolkning

* Siida: Siedier er samiske kulturartefakter, ofte en sten med en særpræget form

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EUROPA PÅ VÅRE SKULDRE

Kate Johanne Utsi

Det er mai og reinsdyrflokken er kommet til sine sommerbeiteområder ytterst på Varangerhalvøya, ut mot Barentshavet, så langt nord og øst du kommer på Fastlands-Norge. Igjen har det vært en utfordrende vinter, med regn i midten av februar som lagde is der det skulle ha vært løs snø. Denne isen gjorde det vanskelig for reinene å komme ned til maten. Det er ikke første gang vi opplever regn i februar, men nå for tiden skjer det oftere.

Mitt navn er Kate Johanne Utsi, og jeg tilhører en reindriftssamisk familie. Mine forfedre har overlevd i disse værharde og karrige områdene i flere hundre år på grunn av reinsdyrene og deres evne til å overleve ekstreme forhold. Samene er sterkt knyttet til reinsdyrene og har gjennom tidene tilpasset seg en livsstil som følger reinens vandring fra kyst til innland gjennom sesongene. Språket vårt, kunnskapen vår, joiken og verdiene våre er nært forbundet med reinsdyrene og naturen vi omgir oss med.

Samene er Europas eneste urbefolkning. Vi er bosatt i nordlige deler av Norge, Sverige, Finland og Russland. Urbefolkninger over hele verden har vært og er utsatt for hard assimilering og kolonialisering.

Min familie ble hardt fornorsket. Min bestefar og bestemor var begge samer som vokste opp med samisk som hovedspråk. Bestefar snakket dårlig norsk hele livet. Likevel lærte de ikke sine ni barn samisk. Min far var den eneste som lærte seg samisk. Han var også den eneste som fulgte i min bestefars fotspor og drev med reindrift, og lærte derfor samisk gjennom arbeidet med reinene. Han så dessverre ikke nytten i å lære sine barn samisk, så jeg og min søster vokste ikke opp med samisk som hjemmespråk. Jeg snakker ikke samisk. Min søster har lært seg det i voksenalder. Jeg har 23 fettere og kusiner på min fars side – ingen snakker samisk. Så i løpet av en generasjon forsvant språket vårt. I dag er det to av mine besteforeldres etterfølgere som snakker samisk. Det kunne vært nærmere hundre. Det er vondt å tenke på. Min bestemor sa at hennes barn skulle lære seg norsk og «bli noe». Og det er hennes erfaringer fra å være samisk i Etterkrigs-Norge som har tatt fra oss så mye av vår samiske identitet.

Det er flere lignende historier fra mange av familiene i mine områder, der den i familien som overtok reindrifta snakket samisk, mens resten av søsknene ikke lærte seg dette. Reindrifta var og er en utrolig viktig del av samisk identitet og kunnskap.

Reindrifta har klart å holde på det samiske, der vi ser at kystsamfunnene og samer utenfor reindrifta har mistet så mye.

I dag er reindrifta under et utrolig stort press fra den grønne industrien. Europa trenger kraft og mineraler for å bytte ut olje og gass til fornybare kraftkilder. I vårt sommerbeiteområde har vi i dag to vindkraftverk. Vi opplever store negative konsekvenser av dette: reinen unngår disse områdene med opptil 10-14 kilometer. Dette fører til at reinene bruker andre beiteområder som igjen blir slitt og dårligere. De første vindturbinene kom for ti år siden, og for syv år siden fikk vi vite at kvartsittgruva som også er i vårt sommerbeiteområde skulle utvide.

Dette var veldig skremmende nyheter for oss. Planene vi fikk presentert gikk ut på å utvide gruva åtte ganger størrelsen den var da. I nesten 50 år har gruva vært i drift. Det meste av aktiviteten har funnet sted helt mot sjøsiden, og har bydd på lite forstyrrelser for reindrifta vår. Men nå skal den bevege seg mye lengre inn i landet og komme inn til viktige beite- og oppsamlingsområder for reinsdyrene. Gruva vil også krysse viktige trekkveier.

Dette var starten på en veldig opprivende og vanskelig prosess for hele distriktet. Gruva ligger i min egen hjembygd. Min far og hans søsken vokste opp her, og flere av mine slektninger har arbeidsplass i gruva. Selvsagt ville dette by på utfordringer både innad i familien og i lokalmiljøet generelt. Men vi anta ikke at Elkem, firmaet bak gruvedriften, ville være med på å nøre opp under en slik konflikt. Jeg hadde sett for meg at Elkem ville ha stram regi på hva som ble kommunisert fra sine folk, og at de ville passe på at vi i reindrifta følte oss godt informert og lyttet til hele veien.

I stedet for opplevde vi at Elkem bevisst brukte, til sin fordel, konflikten som allerede eksisterer mellom reindrifta og de som mener at reindrifta har for mye de skal si i utbyggingssaker og andre arealkonflikter. Det er mange som mener at reindrifta er til hinder for utvikling og nye arbeidsplasser i Finnmark. Slik har det alltid vært – det husker jeg fra jeg var barn også. Og den konflikten er ikke blitt mindre med det grønne skiftet.

Jeg mener at mye av denne konflikten kommer fra fornorskningen. Det er så mange i Finnmark som har tapt sin identitet, og som derfor føler seg forskjellsbehandlet fra de som er «ekte» samer. Dette må oppleves sårt, og det er en grobunn for splittelse mellom oss. I stedet for å stå samlet så angriper vi hverandre. Og dette er til utbyggernes fordel. Fornorskningen fortsetter på den måten ennå i dag. Derfor er det vondt å tenke på at reindrifta, som fortsatt er en viktig samisk kulturbærer, nå er under et så sterkt press som bare er med på å skape mer konflikt i den samiske befolkningen.

I syv år har vi vært i forhandlinger med Elkem. Dette har vært en bratt læringskurve. Elkem er et multinasjonalt selskap med en omsetning på mange milliarder kroner. Det er ikke enkelt å stå opp mot et slikt apparat. Vi har følt oss mistrodd, ført bak lyset og manipulert. Men vi har aldri latt oss kue.

I dag forhandler vi om et mye mindre område enn planlagt, som ikke går over trekkveiene. Men vi vet at om kun få år vil Elkem søke om å gjennomføre utvidelsen de originalt ønsket. Men trekkveiene er reinen sine – de har vandret der i hundrevis av år. Vi kan ikke ødelegge dem, ikke for noen eller noe. Dette er hellige stier.

O – OVERGADEN
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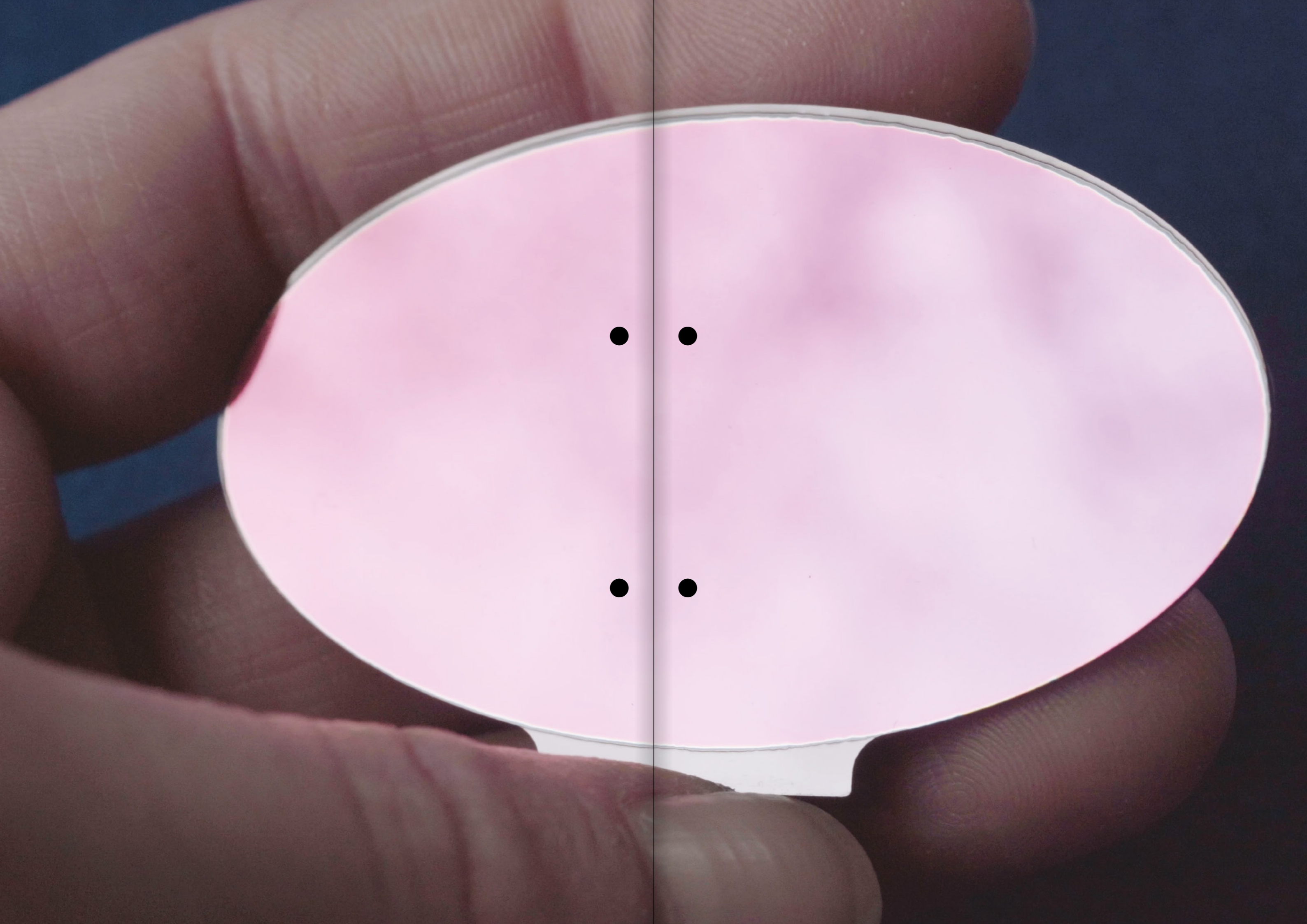
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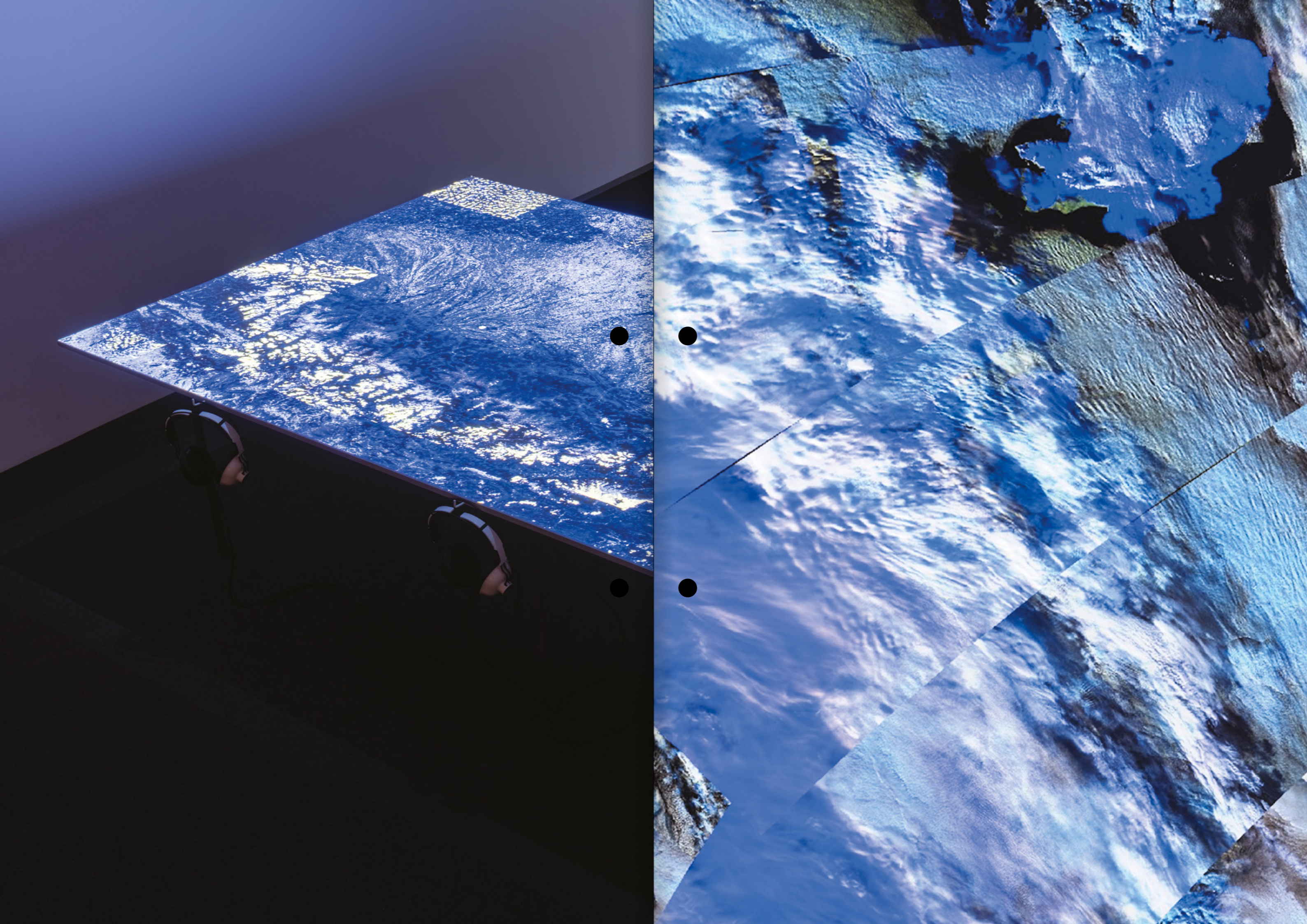














EUROPE ON OUR SHOULDERS

Kate Johanne Utsi

It is May and the reindeer herd has arrived at their summer pastures at the tip of the Varanger peninsula facing the Barents Sea, as far north and east as you will ever get in mainland Norway. It has been another challenging winter, with rains in the middle of February, putting an ice crust on what should have been powder snow. The ice makes it hard for the reindeer to access their food. It is not the first time it has rained in February but these days it happens more often.

My name is Kate Johanne Utsi and I belong to a family of Sami reindeer herders. My ancestors have survived in these harsh and barren lands for centuries with the help of the reindeer and their ability to cope in extreme conditions. The Sami are closely connected to the reindeer and have, over time, adapted a lifestyle that follows the seasonal migrations of the deer, from coast to inland. Our language, knowledge, the *joik* (traditional Sami songs), and our values are closely tied to the reindeer and the nature we surround ourselves with.

The Sami are the only indigenous people of Europe. We populate the north of Norway, Sweden, Finland, and Russia. Indigenous people across the world have been, and are still, subjected to the harsh measures of assimilation and colonization.

My family was subjected to severe measures of Norwegianization. My grandfather and grandmother were both Sami growing up with Sami as their primary language. My grandfather spoke poor Norwegian his whole life. Still, they never taught their nine children to speak Sami. My father was the only one who taught himself the Sami language. He was also the only one who followed in the footsteps of my grandfather and became a reindeer herder. He learned Sami through his work with the deer. Unfortunately, he did not see the point in teaching his children Sami, as so my sister and I were brought up without Sami as our home language. I do not speak Sami; my sister learned it as an adult. I have 23 cousins on my father's side; not one speaks Sami. Over the course of one generation, we lost our language. Today, only two of my grandparents' descendants speak Sami. It could have been close to a hundred. It hurts to think about. My grandmother said that her children would learn Norwegian and "become something". Her experiences as a Sami person in post-war Norway led us to be deprived of a large part of our identity.

There are similar stories in many other families where I am from—family members who assume the reindeer responsibilities speak Sami while others never learn the language. Reindeer herding was, and still is, an incredibly important part of the Sami identity and knowledge. Reindeer herding has helped preserve the Sami heritage, while coastal communities and Sami people not involved in reindeer herding have lost so much.

These days, reindeer herding is under immense pressure from green industry. Europe needs power and minerals to replace oil and gas with renewable energy sources. There are now two wind turbines on our summer pastures. We experience a distinct negative impact from the turbines; the deer avoid these areas by up to 10–14 km. This causes the reindeer to frequent other grasslands, more often causing them to get worn down and deteriorate. The first wind turbines arrived ten years ago and three years later we found out that the quartz mine, also on our summer pastures, was about to expand.

This was frightening news. The plan presented to us demonstrated a mine that would expand by eight times its original size. The mine had been operating for nearly 50 years. Most of the activity had been toward the sea-side with little disturbance to our reindeer activities. Now it was about to expand inland across important grasslands and gathering areas for the reindeer. The mine would also cut across important migratory routes.

This became the start of a harrowing and complicated process for the whole district. The mine is located on my homeland. My father and his siblings grew up here and many relatives work in the mine. Obviously, this would cause challenges both within the family and with the local environment. We had no idea that the stakes on such a sensitive issue. I had imagined they would take strict measures on what was being communicated by their people and that they would make sure to listen to the reindeer herders and keep us well informed throughout the process.

Instead, we felt that Elkem used the already existing conflict between reindeer herders and those who think that we have too much power when it comes to development issues and other land disputes. Many think that reindeer herding is stifling development and job creation in the Finnmark county. It has always been like that; I remember it going on when I was a child as well. This is not a conflict that has slowed down with the green transition.

I think that much of this clash stems from the Norwegianization process. So many people in Finnmark have lost their identity and feel unfairly treated compared to 'real' Sami. This must be a painful experience and it is a perfect breeding ground to divide us.

We attack each other instead of standing united, favoring the developers. In that way, the Norwegianization continues to this day. It is painful to think that reindeer herding, such an important carrier of Sami culture, is causing even more conflict within the Sami population. We have been in negotiations with Elkem for seven years now and it has been a steep learning curve. Elkem is a multinational corporation with billions of Norwegian kroner in revenue. It is not easy to go up against such a powerful machine. Throughout, we have felt mistrusted, sidelined, and manipulated, but we refuse to be subdued. We are now in negotiations over a much smaller area that would not cut across the migratory routes, but we know that in a few years Elkem will apply to expand beyond the planned area. But the migration routes belong to the reindeer; they have walked these trails for centuries. We cannot destroy them—not for anyone or anything. These are sacred paths.

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Britain has argued that in order to face global warming and take on the responsibility that we as humans have for the future of the planet, we could learn from Arctic ontologies where people live with the land, the animals, and other-than-human entities that exceed the realm of what is publicly known.¹⁸ Historically, the *sídeli* has had many roles, one of them was to signal the way. Like cairns, they pointed wayfarers in the right direction. But they were also, as Kramvig and Verran point out, an institution of protocols of fairness, politeness, honesty, and respect.¹⁹ Perhaps the interruptions of *sídeli* that unfold in Finnmark today are particularly timely. If we see these *sídeli* as cairns to navigate an uncertain future—a future replete with unexpected twists and turns of governance processes and environmental impact—then perhaps we might create a broader base from which to find a way. Situated between a troubled past and an unknown future, the *sídeli* stories are broken, their presence is hardly known, yet their unexpected interruptions instigate calls for care and caution in uncertain worlds.

Perhaps it will end up in court, amplifying existing rifts in the local village. What does it take to acknowledge the mountain for everything that it is? How may affective relations come to matter?

Late in the evening, I research the quartzite quarry on my computer. With Google as my research assistant, I learn that the first stages of planning that could lead to a re-regulation of the entire area for mining activities has just begun. The online report prepared by the consulting company SWECO for Elkem had been presented to the public in March 2016.¹⁴ Labelled detailed regulation for the quartzite quarry at Gørgsøhøppi, Gicmas, and Vaggøccarru, it contains 50 pages of detailed mapping and description, listing all the things that allegedly should be taken into account in the upcoming process. I learn that Elkem Tana is one of the largest producers of quartzite worldwide, with a total of approximately one million tonnes of quartzite shipped out through the narrow sound every year. The operations employ a total of 41 people (not all are local). I study the Sami spelling of names of mountain ranges that are new to me, and learn that the expansion will involve a sixfold increase of the total quartz area from 2.5 km² today, to 15 km² if the plans are realized.

If natural resource exploitation is a “sustained project of abstracting substances identified as useful, valuable and natural in origin from their environment,”¹⁵ then that process has just taken another turn. Carefully attuned to the political and legal procedures established by the Norwegian state, it has already done the groundwork of abstraction. By anticipating and naming the various entities that may be impacted by its future operations, it has also assembled the tactics for dealing with them, whether through the form of the due political process, through sidelining them (as marginal or irrelevant) or through financial compensation. In this way, it has already defined the scope of the real, and the scope of anticipated harm. The logic of Norwegian resource capitalism functions within the coordinates of the modern contract. Hugo Reinert writes:

If extractive resource capitalism is a sort of ontological machine – an engine that continuously remakes the world and its entities as already-given, in ways that facilitate surplus value extraction – then it is all the more vital to question the paradigms that subsume it and produce not just nonhuman life but also nonlife as domains of control, use, modification, and productive investment.¹⁶

But what if harm exceeds the domain of an impact assessment? Or more precisely, following Reinert’s proposal to treat harm as a matter for ontological exploration: “What beings exist, such that they can be harmed?”¹⁷ And how might they make themselves known?

18. Brit Kramvig 2015.
19. Brit Kramvig and Helen Verran 2020.
This text is a short version of an article previously printed in Polar Record, January 2021, doi.org/10.1017/S0032247420000443.

14. SWECO 2016.
15. Richardson and Weszkalns 2014, p. 6.
16. Hugo Reinert 2016, p. 96.
17. Ibid., p. 97.

He lamented the loss of herring and haddock in the bay near his house, and said he thinks it is due to the heavy traffic of ships in the sound, ships that transport the quartzite to processing sites elsewhere. And he mentioned that at least two people suffer from what is locally called “steinlungge”, a lung disease caused by mineral dust. All of these relations are included in his PowerPoint presentation. He described the planned expansion of 15 km² as equal to 1,900 soccer fields. And he added that the Norwegian state has promised to subsidize a dredging operation to improve the shipping canal. This is yet another environmental hazard, and might affect the salmon smolt, the trout, and the local seal, as well as sand eel that the smolt feed upon.

Later, I return to Frode to learn more about how the planned expansion matters for the reindeer herding operation. I have plugged in my computer at his kitchen table, where he serves me fried freshly smoked reindeer and coffee. Gradually he conveys an understanding that I, mindful of the fragmentary nature of my own understanding, can at least partially recapitulate, as follows: During the seasonal migration to and from the peninsula, the reindeer need to cross the river Deatnu. In order to get to where they can cross, they follow a route along a valley that takes them between the current quartzite quarry and the planned area of expansion. If this valley is blocked, how will they migrate, and how will they cross the river? Frode’s concerns give us a glimpse into another set of trajectories than that of the quartzite quarry.

He depicts a seasonal migration route that has left its subtle traces in the landscape; he details multispecies relations of domestication that are not easily noticeable for an outsider; and his concern reflects his care for a *sídeli* complex that goes back many generations, while anticipating future generations. But this, and other precolonial reindeer enterprises, are now partly under the governance of state institutions—institutions that know reindeer differently. Furthermore, various infrastructures (electricity lines, roads, windmills) have carved out the area, bit by bit, and diminished the space available for pasture.¹²

The planned expansion of the quartzite quarry is not a case of rampant multinational land grabbing from a local indigenous community, incapable of defending its interest in the state judicial system. The territory in question was handed back in 2005 from state to regional and indigenous ownership, through the so-called Finnmark Act which grants ownership of most of the territory in Finnmark to FEFFO (the Finnmark property).¹³ In 2019, and with a narrow majority, FEFFO voted against the expansion, but FEFFO cannot veto the proposed plans, and in 2020, the county governor warned against environmental impact on the marine environment. But none of this can guarantee that the process will come to a halt. Perhaps it will proceed as proposed.

12. See also Tor A. Benjaminson, Inger Marie Gaup Eira, and Mikkel Nils Sara 2016; Mikkel Nils Sara 2011.
13. For details, see Gro B. Ween and Marianne E. Lien 2017.

Rather, it can be argued that the political efforts that curbed the most intensive assimilation were based on an idea of “equality as sameness” through dichotomization and complementarization of ethnic emblems.⁹ Sami revitalization was achieved through the establishment of numerous institutions that mimic those of the Norwegian nation (a Sami parliament, a Sami national day, a Sami flag and the like), but rarely questioned the secular, scientific foundation that underpins Norwegian (and hence also Sami) political discourse. Rather than forging ontological difference, what Marisol de la Cadena and Blaser refer to as the pluriverse,¹⁰ Sami ways of conceptualizing and practicing their world have thus not only been ignored, but are “made unintelligible and unimaginable as possibly appropriate descriptions of reality.”¹¹

The planned expansion of the quartzite quarry will not only interrupt reindeer pastures. Many other practices and landscapes are at risk, including Mjelkevaggi, a favored lake for Arctic char, and marine life. Following Frode’s suggestion, I approached Yngve, who had recently spoken up against Elkem at a public hearing and had prepared a PowerPoint presentation, detailing numerous potential effects of the planned expansion on local livelihoods. I met Yngve at his house in Lavvonnjarg, a tiny settlement on the sound that marks the entrance to the fjord where the quartzite quarry is located. Several times a week, freight tankers literally pass by his house, fetching quartzite for further processing. Yngve picked me up with his open motorboat, from the sandy peninsula and nature reserve called “Høyholmén”. Some friends arrive while we talk,

and we quickly map our shared social acquaintances while he prepares a meal of freshly boiled King crab with white bread and mayonnaise. Aware that I might interrupt our casual dinner conversation, I told Yngve and his friends that I kept hearing stories about strange things happening around the quarry, and so I wondered, was there anything sacred about it? Yngve’s response was abrupt and cautious: “Who told you that?” I replied that several people had alluded to such events, but hesitated to name anyone in particular.

Soon afterwards, the topic of accidents came up again in the now-familiar format: warnings had been uttered but not taken seriously, and then something unexpected happened (a rock suddenly came down) that was both dangerous and hard to explain. These events were not part of his PowerPoint presentation. Yngve’s intervention is part of a political process, and he knows the unspeakable rules. As he described the process so far, he mentioned the company’s lies and deceit. He explained that Gicmas used to be a preferred site for migratory birds as well as grazing land for reindeer and sheep.

9. Marianne Gullestad 1992.
10. Marisol de la Cadena and Mario Blaser 2018.
11. Liv Østmo and John Law 2018, p. 350.

And, in fact, even nation-states themselves see the underground frontier as a possibility for reinvention, a process whose recent developments in South America (with Bolivia and Ecuador's constitutional reforms) has been extensively described by legal scholar Boaventura Santos, amongst others.²⁹

All these are projects that have in common the establishing of a new relation between resources and politics. But the reason these emerging political projects are possible, is that today technoscientific tools of enquiry and analysis bring forth, like never before, the complex entanglements between man and nature, providing a different perspective regarding the histories and realities of resource extraction. They do so, firstly, by bringing together problems that were previously seen as unrelated, such as environmental and labor disputes; secondly, they bring to the fore violence that was previously ungraspable; and, finally, they allow political claims to be articulated in novel ways, as was the case of the Ecuadorian Yasuni ITT project that mobilized science not against the state but in support of alternative modes of development.³⁰ Of course not all politics can be made commensurate with technoscience. And yet, the more the attraction for the underground El Dorado leads to the development of technosciences, the more these tools become available for other purposes, co-determining the imaginations of alternative political possibilities.

AFFECTIVE FUTURES AND UNCANNY PRESENCES

AT GJEMÅS, FINNMARK

Marianne Lien

INTER- RUPTIONS

I had always noticed the Gjemås mountain for its distinct layers, tilting in the evening sun, like an upright sandwich, as if swaying, falling, and then it froze. But I had never really seen its eastern slope, a sand-colored meshwork of roads gnawing on its interior—not until that summer. *Gjemås*, amongst Sami speakers—I guess even knew it had a name. Nobody told me, and I guess I never asked. The mountain is easily remembered, as its steep layered shape forms a significant part of the scenery as you take the road, from the river Deatnu and north across the Varanger Peninsula, toward the Norwegian coast of the Barents Sea. Nested between the peninsula and the brackish river, it marks a steep transition between wetlands to the south and the mountain plateau to the north. For some, this is only a familiar sight along the road where the mountain drops steeply into the water below. For others, it is a place to make a living, as the river branches off to a narrow sound; a lively place for fishing, and the outskirts of a reindeer pasture needed along their route of seasonal migration. The quartzite quarry is situated in Juovlavuoma (Austerana in Norwegian), a village settlement of less than 200 inhabitants near the Deatnu river. Deatnu is the name of the river, as well as the municipality that encompasses the quarry.

Open-pit mining is a frequent source of controversy in the Arctic and beyond. Its invasive technologies disrupt landscapes and, in turn, irreversibly alter conditions that sustain specific ways of living. Often, these controversies unfold where indigenous ways of interacting with landscapes are already under threat. By “extractivism”; I refer to processes by which industrial corporations undertake large-scale and irreversible extraction or removal of non-renewable inorganic matter, such as minerals, coal, or oil. Extractivism denotes not only the material processes of extraction, but also the ideology and the conceptual apparatus that supports this practice, which often involves a naturalization of resources as there for taking.¹ Tracing the uneven unfolding of a possible future, a rumor, a prospect, or an interruption, I pay attention to the fragmented nature and affective dimensions of resource extractivism as it thickens around a proposed expansion of a quartzite quarry on the mountain Gjemås. I approach this quarry and the controversy that currently unfolds as an occasion for mustering various manifestations of the real.

1. See, for example, Frida Hasstrup and Marianne Elisabeth Lien 2020; Tanya Richardson and Gisa Weszkahns 2014.

com/2013/10/28-amazon-gold-mining.html.

29. Rhet A. Butler, “Gold mining in the Amazon rainforest Universities, 2010.

Universiad Mayor de San Simon, Centro de Estudios Superiores *América Latina: perspectivas desde una epistemología del Sur*, La Paz:

Boaventura de Sousa Santos, *Refundación del estado en*

So, this was the quartzite quarry—so hidden from plain sight for those who stay on the main road, and so much bigger than we thought. A few days earlier, my friend had shared that she had heard that once there was an accident: a large boulder had come down and fallen into the water. She had heard it said that an old Sami man had predicted that it would happen. But she did not know much about it and suggested that I speak with someone else—perhaps the reindeer herders would know? These conversations were my first encounters in this region and agential entity that could potentially interfere in the course of the events. Sjeidi are well-known figures of Sami religion. Known as Sami sacrificial stones, they are found in many places in northern Scandinavia. Many are forgotten, but quite a few remain as remnants of a time when the Earth was alive with forces that exceed ontological assumptions that constitute the real in common public discourse. Often classified as “heritage”, these stones are, however, more than relics of the past.

The Varanger Peninsula bears little resemblance to the Andean worlds described in accounts of cosmopolitics in relation to other-than-human presences evoked as part of mining controversies, such as for instance those described by Marisol de la Cadena and Fabiana Li.⁵ Yet, the association between sacred rocks and indigeneity is a potent one. The attribution of agency to seemingly inert materials such as rocks is no small matter.⁶ As Kristina Lyons reminds us, this has been “the grounds on which to dehumanize colonized and enslaved peoples for their so-called pre-modern mentalities.”⁷ My interlocutors in northern Norway are rather cautious about evoking what might be thought of as superstition, and so am I. Inculcated in a “modern” way of perceiving the world, we have learned that matter is essentially inert, and that alluding to anything else is “myth” or “superstition.” Hegemonic discourse in Norway is informed by a fairly secular version of Christianity. Norway’s protestant Lutheran Church has few and simple rituals and an emphasis on individualized and personal belief in Christ. Hence, Norwegians learn to appreciate environmental surroundings through the metaphysics of scientific realism. Through schools and public discourse, this affects Norwegian and Sami alike, yet the implications could be different, due to the long and dark history of Sami subordination, and the way the assimilation policy in Sápmi was particularly harsh towards Sami beliefs and religious practices.

The recognition of Sami as an indigenous people, and the creation of the Sami parliament in 1989 was a late response to more than a century of colonization of Sami people and practices by Norwegian state authorities. The revitalization of Sami ethnic identity and language has made it easier for the younger generation to identify as Sami, but has not necessarily challenged the dominance of a secular, modern logic of reasoning, especially in public discourse.

Late evening sun is in my eyes as I approach

Sjeimevann, or Nástegjávri in Sami, a lake on the mountain plateau just north of Juovlavuoma, where the head of the reindeer *sjeida* in this region has his summer camp.² Smoke comes out of his *lavvo*.³ I park the car, hoping to be able to go through some field notes from a previous visit. August is the time for marking the calves before the reindeer move towards their autumn pastures. With around 4,000 animals, this sjeida is busy for several weeks. I had spent the day before watching them mark calves in the reindeer corrals. But today my interlocutor, Frode, who has just finished a day’s work wants to relax in the sun, and look after the fire. “Don’t go inside”, he says, “you’ll smell of smoke afterwards!” Frode adds salix to the fire, says it makes the meat turn red. Says it’s the same call I saw in the corral yesterday, wounded. I can taste it tomorrow. But now he wants to talk about something else. Frode tells me he is worried. It is about the quartzite quarry. It interrupts his sleep; he finds himself awake at night pondering what to do. As we sit by the lavvo, I learn that there is a quartzite quarry in Juovlavuoma. It has been there for more than 40 years, owned by a well-known company called Elkem. A few years ago, Elkem was bought by Chinese investors, and with new owners they plan to expand. They claim that the quartzite available in the current open quarry will only last a few more years, so to secure a continuation of the quarry, they need to open up a vast new area for quartzite extraction. The planned expansion will bring the quartzite quarry right next to the area where the reindeer gather now, near the boundaries of the fenced area known as “the grazing garden”. Reindeer graze on non-domesticated plants, and move freely most of the time. The grazing garden is where they are gathered in late summer, while calves are marked and tagged. It is a vast area, and needs to be, in order to provide enough to eat for the reindeer for however long it takes before they can pass on to the autumn pastures, and then, a couple of months later, toward the sound where they can cross the Deatnu river to reach their winter pastures further south.

Driving back from the lake, I recall snippets of other conversations when the same quartzite quarry came up: an incident in 1975 when they shot dynamic near Gjemås. A huge rock came rolling down, and buried the foundation of the crushing plant. Old folks said that that they should not have been doing this so close to the *sjeidi*.⁴ Another time I passed Juovlavuoma with a friend from the coast. We drove as far as we could in the direction of the quarry. A short walk from the nearest parking lot we explored the huge hollow pit, as if a giant creature had taken a bite of the landscape. We saw the idle heavy machinery up close, and gravel roads that criss-crossed the greater part of the slope facing east. 2. A sjeida is a Sami local community that has existed from time immemorial 3. A lavvo is a temporary dwelling used by the Sami people of the Arctic. 4. Sjeidis are Sami cultural items, usually a rock with unusual shape.

5. Marisol de la Cadena 2015; Fabiana Li 2013.

6. Elizabeth A. Povinelli 1995.

7. Kristina Lyons 2020, p. 42.

At the same time, hydrocarbons located in hard-to-reach areas like the Arctic, in deep offshore reservoirs or militarily unstable areas, have also become the object of massive exploration—not to mention the immense pressures for the removal of legal and political obstacles to extracting oil and gas from nature reserves and protected areas. As Mazen Labban argues, oil is not so much about reserves but about the willingness to find them.¹⁵ Countries such as Angola or Canada are now part of the list of major oil exporters, their new-found riches granting them new geopolitical powers. And this expansion of hydrocarbon extraction has been accompanied by an expansion in the mineral prospection of gold, copper, and lithium. Today, nations like Mongolia (copper and coal), Peru (copper and zinc), and Mozambique (coal and gas) have been added to the list of established mineral exporters like Chile, the US, and China.¹⁶ The extraction of both minerals and fossil fuels is part of a race that is taking place due to large-scale Chinese industrialization and expansion of consumer electronics markets, but also due to industrial development in India and other BRIC nations. As such, the knowledge we have about their size, known quantities of reserves—or even the simple fact of their existence—is in fact a function of both capital and technological investments.

In this context we can identify a series of what I would like to call underground attractors: unique areas of geopolitical dispute, frontier conditions brought about by the acceleration of extraction in such areas as the Arctic region, the Amazonian hinterlands, the Orinoco oil Belt in Venezuela, the Athabasca Tar Sands in Canada, or the East and South China Seas. Within nonlinear or dynamic systems theories the term “attractor” refers to a system’s behavioral tendency. In time, any given system tends to repeat certain behaviors, even if never in the same way. For this reason I will use the term “underground attractors” in reference to the ways in which the underground frontier seems to function. It is obviously hard to claim that the history of any of these cases consists of a single system; neither is it relevant to define what exactly that system is made of. And yet to a certain extent the analogy seems capable of grasping a series of important aspects of underground frontiers insofar as these territorial conditions remain predicated on the extraction of resources. It captures how the frontier has temporal cycles, which despite historical variances seem to repeat the same pairing of territorial transformations with violent disputes. In Chile the frontier was established with the extraction of gold in the early nineteenth century, followed by nitrates, mostly in the late nineteenth century, and copper since the beginning of the twentieth century. Each of these different cycles was paralleled by legal transformations and new infrastructural projects.

The extraction of mineral resources requires a complex series of legal frameworks, which are theoretically supposed to regulate the relation between different interested parties, but which historically have been used to legitimize plunder, land grabbing, and dispossession. Starting from the example of the Porosi mines in Bolivia, where approximately eight million indigenous enslaved people lost their lives, Ugo Mattei and Laura Nader trace how the rule of the law was central to the Western imperialist and colonial project (for instance, the doctrine of terra nullius denied the existence and prior rights of original inhabitants),¹⁹ and argue that it has expanded into a mechanism of global plunder working within regimes of transnational law and supporting the neoliberal project.

LAWS AND LOGISTICS

We witness this role of law at work today in the multiplication of special economic zones, enclaves with exceptional taxation regimes and labor regulations that circumvent the democratic accountability of the nation-state, having become today the most common territorial mechanisms of capital expansion.

17. See Mitchell for an analysis of the political affordances that each resource and its mode of extraction allow. Timothy Mitchell, *Carbon Democracy: Political Power in the Age of Oil*, London: Verso, 2013.

18. This is in many aspects the continuation of the colonial project, the history of which is presented with amazing clarity by Eduardo Galeano when describing Latin America’s history of quests for gold, silver, or copper, which started with Portuguese and Spanish colonialism and is today promoted by the international financial and banking institutions: the International Monetary Fund (IMF), the World Bank, USAID, and so on. Eduardo Galeano *the Pillage of a Country*, New York: Monthly Review Press, 1997.

19. Ugo Mattei and Laura Nader, *Plunder: When the Rule of Law Is Illegal*, Malden, MA: Blackwell, 2008. The term “Terra Nullius” is used to describe a quasi-legal mechanism common to European colonial powers whereby any land that would be considered empty could be acquired by a sovereign state; and that the laws of that state would henceforth be applied to that territory. As a consequence, its peoples would, at best, become subjects of the new sovereign power, and at worst killed or enslaved. Importantly, existing social and political arrangements, customary laws, forms of property or ownership were disregarded.

Oil extraction and mining operate through state-sponsored enclave regimes, this being one of the reasons why many argue they undermine the state’s legitimacy.²⁰ In a broader account, David Harvey argues how the role of law has been central to the increase of “accumulation by dispossession” actively promoted by neoliberal structural adjustment policies and the partnership of the state with private capital. This is a process that is not exclusive to the appropriation of fossil fuels or mineral resources but part of a wider process of destruction of projects but also to nationalist claims or claims of sovereignty and independence.¹⁸

According to such accounts it is not that the violence of resource extraction needs to be accounted for in law, but that law itself, and its history, is inseparable from the policies and violence of resource extraction. Together with legal frameworks, the attraction of the underground is also predicated on the implementation of a vast network of planetary logistics, which manage the transnational flows of raw materials, commodities, and labor.²⁵ The attraction of oil and minerals is, after all, due to the global necessity of these commoditized natures as regards the operation of global transport, industrial and agricultural systems. Following Henri Lefebvre closely, geographer Neil Brenner describes this reterritorialization of capitalist expansion over the whole Earth as a process of planetary urbanization,²⁴ a spatial politics of circulation that tends to ignore distinctions between urban and non-urban conditions, replacing them with a net that is traced across the entire world, so that it “would be ever more directly instrumentalized and operationalized to serve the voracious pursuit of capitalist industrial growth.”²⁵

By taking into consideration its legal dimensions we can see how this expansion is not simply a matter of infrastructures but of complex assemblages of heterogeneous components, including scientific, technological, and social ones.

20. Eduardo Gudyñas, “Dicez Tests Urgentes Sobre El Nueveo Exactivismo: Contextos y demandas bajo el progresismo sudamericano actual” in *Extrativismo, Política y Sociedad. Centro Andino de Acción Popular*, Centro Latinoamericano de Ecología Social, 2009.

21. David Harvey, *Spaces of Global Capitalism*, London: Verso, 2006, p. 43.

22. Anna Lowenhaupt Tsing, *Friction: An Ethnography of Global Connection*, Princeton: Princeton University Press, 2005, pp. 27, 28.

23. Sandro Mezzadra and Brett Neilson, *Border as Method*, Durham: Duke University Press, 2013.

24. Neil Brenner, *Impositions/Explosions: Towards a Study of Planetary Urbanization*, Berlin: Jovis, 2014.

25. Ibid., p. 17.

The Niger Delta in Nigeria or Venezuela’s Orinoco Belt’s extractive assemblages include pipelines, refineries, and reservoirs as much as they include security fences, oil bloc maps or petrochemical research labs. They constitute what call territorial machines, apparatuses or assemblings of legal, spatial, logistic, and subjective systems, leaving a clear imprint over the surface of the Earth as they trace new territorial geometries that extend deep into remote hinterlands on the African or South American continents.²⁶ This is a list composed of access roads, water canals, mining towns, tailings ponds, and, more dramatically, the digging of gigantic canyons by open-pit mines, such as Chuquibambata in the Atacama, the river dredging and damming of deltas or the massive clearance of tropical forest or savannah—transformations that take place on such a large-scale that they can only be grasped from aerial photographs or satellite images. In this light, the use that I have made previously of the term “attractor” closely obeys the diagram provided by Manuel De Landa in *A Thousand Years of Nonlinear History*,²⁷ where he argues that we should understand these alterations of the Earth’s surface as the process by which the forces of underground attractors slowly mineralize over the surface of the Earth. But what De Landa fails to mention is how violent such “mineralization” is, both to the environments and to the peoples that inhabit the underground frontier.

POLITICS

Finally, what I would like to point out is how there is a multiplicity of subaltern actors that find in this tension characteristic of the underground frontier a space to insert political claims: indigenous peoples, social movements, student movements, or local communities have recently taken disputes in the underground frontier as an opportunity to propose radical political transformations. More than that, they have done so by incorporating, instead of denying, technoscience and resources in their claims. An important example has recently been given by the indigenous peoples of Guatemala who have organized for the first time into a political platform to contest the 2015 elections. This is a movement whose main common cause is the necessity to claim control over the environment and the extraction of natural resources against state-protected private companies.²⁸ Another important case was the focus of the Chilean students movement of 2011 on copper re-nationalization, bringing back a project central to Allende’s government.

26. “Territorial machines” proceed both by operations of stration (classification and delimitation) and by the production of models of subjectivity (the idea of energetic sovereignty, or the images of eco-friendly development).

27. Manuel De Landa, *A Thousand Years of Nonlinear History*, New York: Zone Books, 1997.

28. Christin Sandberg, “Indigenous Guatemalans Create Political Platform for 2015 Elections”, *Upside Down World* (10 December 2014), upside-downworld.org/main/guatemala-archives-35/514-indigenous-guatemalans-create-political-platform-in-2015.

THE UNDER-GROUND FRONTIER

Godofredo Pereira

Techno-scientific modes of seeing, classifying, and measuring the Earth are reformulating the ways in which territorial disputes are currently played out. Due to the mobilization of science that is being reduced we today inhabit an Earth that is being reduced to discrete components. The extreme case of this condition is what I will call the underground frontier. The underground is no longer simply the space where resources are located, but has itself been converted into a resource. However, if one wishes to investigate the processes by which the underground has been converted into a resource and the role of technoscience in these processes, one should be prepared to investigate the spatial and political assemblages of which technoscience is part: how it is mobilized, used, financed, and how it becomes part of wider political, cultural, or legal claims.

AXIOMATICS

The underground frontier emerges from a context in which the Earth and its constituent elements are increasingly abstracted into discrete sets of data. According to Laymert Garcia dos Santos, this is a consequence of the information paradigm which, emerging from cybernetic debates, proposes to understand the whole world—human or non-human, animal or machine—according to a common epistemic principle.¹ Indeed, from genomics to finance, the world today is conceived as a problem of coding, of managing increasing amounts of data. Equally important is to notice how this process of coding has invested in (and benefited from) constant advances in technologies of data collection, analysis and interpretation. Up in the sky, a vast network of public and private satellites is today equipped with multispectral remote-sensing tools to analyze surface conditions for mineral prospection or land use analysis; the increase in computer processing power allows the global climate to be modeled and simulated via quantitative methods with increasing detail; and down below, oil spills are classified and fingerprinted according to chemical composition while biotechnologies are increasingly dependent on bioinformatics for the modeling of living systems.

1. Laymert Garcia dos Santos, "High-Tech Plundering, Biodiversity and Cultural Erasion: The Case of Brazil", in Boaventura de Sousa Santos (ed.), *Another Knowledge is Possible: Beyond Northern Epistemologies*, London: Verso, 2007.

This multiplication of technological abilities is allowing an extensive classification of the Earth in its minute details, a process whereby the sampling of minerals for energy extraction and the sampling of microorganisms for medical purposes fulfill similar purposes. Be it human, animal, microbial, or geologic, all aspects of the Earth are made into resources once they are translated into datasets—the epitome of what world picture, where the entirety of nature is framed as a standing-reserve (*bestand*).² This condition, whereby resource extraction becomes the paradigm, I have called the axiomatic Earth.³

The important point here, however, is that once captured by quantification procedures, the Earth is made commensurable with capitalist modes of valorization and therefore becomes abstracted by capital as quantities whose differential relations are productive of surplus values.⁴ In this context, science becomes a motor of accumulation, each new analysis allowing for new forms of valorization and circulation. The epitome of this process is the transmutation of both people and materials into "decoded flows" in the operation of contemporary financial devices.⁵ Thus the constitution of the underground as a frontier, as well as the specific kinds of disputes that emerge therein, cannot be uncoupled from the modes of seeing and knowing the earth that are characteristic to the capitalist partnership with technoscience. Rather, it is paradigmatic of the most violent extremes of this process. I specifically use the term technoscience following Boaventura de Sousa Santos in the claim that the two (technology and science) cannot be detached to prevent the common claim of science's presupposed neutrality.⁶

2. Martin Heidegger, *The Question Concerning Technology, and Other Essays*, New York: Harper & Row, 1977.

3. Axiomatics is a term that comes from logics and mathematics. An axiom is a starting point of a theory, a self-evident truth (postulate or hypothesis) that serves as the basis for the construction of a formal system, whereas axiomatics are a set of axioms that define a formal system. An axiom is a rule that is necessarily indifferent to the nature of what it refers to. What I am interested in here is this tension between an instrumental form of knowledge and the problematic limits of that same instrumentalization, namely the distance between the axiom and the world, that becomes the internal limit to the axiomatic system. By using the term axiomatic I also refer to Deleuze and Guattari's description of capitalism.

4. Gilles Deleuze and Félix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia*, Minneapolis: University of Minnesota Press, 1983.

5. For a discussion of financial semiotic regimes and their reliance of the management of decoded flows see Maurizio Lazzarato, *Signs and Machines: Capitalism and the Production of Subjectivity*, Los Angeles: Semiotext(e), 2014.

6. Boaventura de Sousa Santos, "A Discourse on the Sciences", *Life*, Lanham: Lexington Books, 2007.

7. See Isabelle Stengers, "Introductory Notes on an Ecology of Practices", *Cultural Studies Review*, vol. 11, no. 1 (January 2005), pp. 183–96.

8. On the internal heterogeneity of science see Isabelle Stengers, *Cosmopolitics II*, Minneapolis: University of Minnesota Press, 2011.

9. John Johnston, "Machinic Vision", *Critical Inquiry*, vol. 26, no. 1 (1999), p. 27.

10. Bruce Braun, "Producing vertical territory: geology and governmentality in late Victorian Canada", *Ecumene*, vol. 7, no. 1 (1999), pp. 7–46.

11. Leonardo Maugeri, *Oil: The Next Revolution*.

12. Ibid., p. 586.

13. On the atmospheric politics of arial pollutants see Adrian Lahoud, "Floating Bodies", in Forensic Architecture 2014.

14. Targeting and the Visual Geopolitics of the Underground", in Forensic Architecture (ed.), *Forensics: The Architecture of Public Truth*, Berlin: Sternberg Press, 2014.

15. Ryan Bishop, "Transparent Earth: The Autopsy of Aerial

After Isabelle Stengers and Donna Haraway we know that science is neither homogeneous nor necessarily eliminativist. Yet the project of "decolonizing science"⁷ requires us to start by understanding how science has been used to undermine other forms of knowledge production.⁸

This complexity of science, technology, and capital can be clearly discerned in the underground frontier. In fact, the emergence of the underground as a frontier is predicated on investments in technology and science. For instance, the expansion into areas of difficult access or the ability to extract unconventional resources is reliant on investments in technologies of soil perforation and geotechnical intervention. But more than that, the underground itself could not exist without technoscience and the ways in which it has radically altered our regimes of perception: today, sensing machines allow us to visualize the underground: powerful computers allow us to process data from the depths of the Earth; simulation machines allow us develop algorithms that model the Earth's future behaviors. At a distance, hyper- and multispectral radiometers mounted on satellites orbiting the Earth at 12,500 mph classify the surface of the planet; geophones and thumper trucks capture seismic reflections and refractions from the Earth's depths that are then processed by complex algorithms into 2D sections or 3D cubes; boreholes are drilled to sample the Earth's composition. The underground we know is a fabrication, produced according to what John Johnston, following Félix Guattari, would call a machinic vision.⁹ The point is not that the underground is today more adequately represented, nor that we can see more of it, but that what we perceive cannot be disconnected from both while using them. In other words, the constitution of the underground as a problem of thought and a frontier of capitalist expansion is immanent to the specific forms and practices of knowledge production that determine what I call here the axiomatic Earth.

As a consequence of this, it becomes clear how the emergence of new technologies is inseparable from the emergence of new disputes. In the same ways that in the nineteenth century the construction of the vertical dimension of territory—as a consequence of the co-evolution of geological sciences and the industrial revolution—constituted the problem in law of distinguishing between underground and surface property regimes,¹⁰ so today technoscientific perceptions of the underground raise a series of new problems.

7. See Isabelle Stengers, "Introductory Notes on an Ecology of Practices", *Cultural Studies Review*, vol. 11, no. 1 (January 2005), pp. 183–96.

8. On the internal heterogeneity of science see Isabelle Stengers, *Cosmopolitics II*, Minneapolis: University of Minnesota Press, 2011.

9. John Johnston, "Machinic Vision", *Critical Inquiry*, vol. 26, no. 1 (1999), p. 27.

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15. Ryan Bishop, "Transparent Earth: The Autopsy of Aerial

The most immediate of these problems is that of the underground becoming a strategic geopolitical domain, leading to its militarization (not by coincidence, as the military is the main source of funding of scientific research) in the forms of surveillance programs. Some of these, like the Transparent Earth project by the Defense Advanced Research Projects Agency (DARPA), propose to directly model the full subsurface of the Earth.¹¹ According to Bishop, "a host of projective tools and algorithms that estimate and predict tectonic shifts and other subterranean movements."¹² But over and above understanding subterranean spaces as strategic military sites, it is the geopolitics of resources that has come to dominate the new underground disputes, particularly in two areas: disputes over use and resource ownership, due to the often ambiguous relation between property regimes based on surface jurisdictions and an underground domain that exceeds them; and disputes over the consequences of resource extraction, such as soil or aquifer contaminations that cross below jurisdictions, emissions from burning fossil fuels that migrate into the atmosphere or particulate materials that are spread by wind.¹³ All these are problems that were previously framed in a very different way, or did not exist at all. Like the underground we know today, they could not be seen, perceived, measured, classified, quantified, or even debated.

ATTRACTION

If the underground frontier has been expanding since the early days of European colonialism, the recent acceleration in the quest for energy and mineral resources prompted by investments in new technologies of seeing and measuring has taken this process to an entirely new level. Between 2000 and 2010, global oil production capacity recorded a massive increase, from 80 to 90 million barrels per day (mbd) and is expected to rise even more, which is even more amazing if we consider peak oil theories that indicated a progressive decrease in oil extraction due to the expected global depletion of reserves.¹⁴ This revival of resource extraction results from large-scale investments in new technologies of extraction (particularly horizontal drilling and hydraulic fracturing) that are able to harness non-conventional gas and oil resources such as extra heavy oils, tar sands, tight oils/shale, and pre-salt oils.

11. Ryan Bishop, "Transparent Earth: The Autopsy of Aerial Targeting and the Visual Geopolitics of the Underground", in Forensic Architecture (ed.), *Forensics: The Architecture of Public Truth*, Berlin: Sternberg Press, 2014.

12. Ibid., p. 586.

13. On the atmospheric politics of arial pollutants see Adrian Lahoud, "Floating Bodies", in Forensic Architecture 2014.

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16. Ryan Bishop, "Transparent Earth: The Autopsy of Aerial

17. Ibid., p. 586.

18. On the atmospheric politics of arial pollutants see Adrian Lahoud, "Floating Bodies", in Forensic Architecture 2014.

19. Targeting and the Visual Geopolitics of the Underground", in Forensic Architecture (ed.), *Forensics: The Architecture of Public Truth*, Berlin: Sternberg Press, 2014.

20. Ryan Bishop, "Transparent Earth: The Autopsy of Aerial

INTRODUCTION

that makes it possible to 'see', surveil, and remotely register the Earth's soil layers, landmasses, and

migrations. The optical mirrors are formed of silicon carbide, an extremely hard material used in heat shields for space rockets. Hansen tracks the silicon

carbide optics via the satellite industry's hi-tech chains of production to their ground substance: the stone quartzite. (In fact, she requested permission from various producers to film the making of the optical mirrors but was refused.) It turns out that one of the

world's largest quartzite quarries, extracting around 850,000 megatons annually, is situated in the former Danish-controlled area of Sápmi in northernmost Norway, by the depopulated village Austerana, close to the Russian and Finnish border. Moreover, it turns out that the largest stockholder of the extraction

company is China National BlueStar which plans to expand the mine sixfold. In brief, this is a geopolitical minefield, not least since the local, indigenous Sami population is still, in part, supported by reindeer herds migrating through the area.

In the main space of the exhibition the quartzite stone is the focal point of an engulfing audiovisual collage. Following the stone as a material witness to the extraction cycle, three grand screens transport the visitor from quartzite to silicon carbide to optical mirrors; from sailing around the quarry at the mountain

Gievnås by boat and entering the quarry (right, grand upright screen) via a drone view of migrating reindeer tracks where the company is planning to expand the quarry (grand screen on ground), to a close up of the artist and Božek's hands sorting quartzite, silicon carbide, and optical mirrors (left, smaller upright screen).

Hansen thus creates a material cross-section of the globally controlled extraction of resources and related questions of consequences for the local ecology, the indigenous population, economic profit, and a wider industry of transnational (satellite) surveillance.

The quartzite becomes a point of departure for a forensic and poetic journey, considering how this stone can bear witness to geopolitical exploitation. The exhibition thus asks who—human or non-human—gets to pose political demands and control a landscape?

Rhea Dall,

Director, June 2023

It is a great pleasure to introduce this publication, a companion to Nanna Elvin Hansen's solo exhibition at O—Overgaden. Since 2021,

O—Overgaden has, with the support of the Augustinus Foundation, published a monographic series in conjunction with the large-scale in-

house solo exhibitions, aiming at expanding the conversations around each show and produce new, offsprings material. In this particular case we've been fortunate to be able to include the voices of Kate

Johanne Utsi, Mariamne Lien and Godofredo Pereira and are very grateful for all contributions. Moreover, a warm thank you to in-house editor Nanna Frits

and the graphic design team at fanfare for their always dedicated work, and of course to the artist for generously sharing her conceptualizations and expanded co-thinking with all of us, through both the exhibition and this publication.

The practice of the young Danish artist Nanna Elvin Hansen moves in the gray between art, research, and grassroots activism. Building audio and film projects through collaborative processes, her works unveil how structural violence and historical inequality impact human rights and material extraction, as well as human and non-human migration, and displacement.

For her first grand-scale institutional show, produced for O—Overgaden, Hansen has created the major new film and sound installation *Groundings*, collaborating with sound artist Eliza Božek, among others. Based on long-term research on the quartzite quarry at the Gievnås mountain in the Sápmi region of northern Norway, Hansen's investigation digs into questions of the manmade structures that control Earth's raw materials and ground—hence the title *Groundings*. How technology amplifies the mapping, analysis, extraction, and profitability of natural resources and how the core resources employed in these new technologies and shifting geopolitics are the Earth's raw materials themselves (just think of the chip in your smartphone).

Hansen's forensic project takes as its point of departure the optical mirrors (also called SiC-optics) used in the satellites that orbit Earth daily. In the filmic prologue, co-produced with data engineer Halldan Mouritzen, shown on a grand table in the exhibition's first space, the artist navigates satellite imagery taken from this technology of optics—kind of extreme, augmented eyes—

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Nanna Elvin Hansen

Groundings

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