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More-than-music

Echosystems, acoustemologies and histories of listening from Sápmi

Nicola Renzi

ACADEMIC DISSERTATION

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Abstract

The challenge of defining ‘music’ and ‘sound’ across cultures has been a persistent concern in ethnomusicological and anthropological research from the outset of these fields. Top-down academic applications of these concepts often remain unquestioned, affecting the rich plurality of local classifications for diverse sounding practices and experiences alongside their associated bodies of knowledge. This dissertation critically examines the relevance of these overarching categories in the context of Sámi acoustemologies, proposing a novel theoretical paradigm derived from and informed by Indigenous sound ontologies: ‘more-than-music’ (*eanet go musihkka*).

‘More-than-music’ seeks to challenge the ethno-anthropocentric characterizations of sonic relationships across societies and environments, which emerge from academic discourses. Its bottom-up nature underlines the necessity to acknowledge the complexity of local onto-epistemologies and the agencies of human and other-than-human beings in academic research practices. To measure the validity and applicability of the ‘more-than-music’ paradigm, this study places emphasis on *juoiggus* as a Sámi more-than-musical expression and biocultural heritage that bridges human performativity and aesthetics with voices of other-than-human subjectivities and animate environments. Within the scopes of this thesis, ‘more-than-music’ transcends its theoretical meanings, becoming a literal call to explore Sápmi ecosystems in their biocultural complexity – from a perspective ‘beyond music’. This entails primarily a methodology of listening-with Earth, to learn from intangible sonic relationships between Sámi individuals, communities, and the land. Such approach contextually examines the desirable and undesirable quality of diverse sonic events, confronting the impacts of colonial extractivism and climate change on the delicate ecosystems of the Arctic and leading to considerations of sound heritagization and sustainable practices for soundscape monitoring and preservation.

The analysis is guided by the research questions: How can *juoiggus* be explained as something more-than-music? What can we learn from the sonic relationships between individuals, communities and place through *juoiggus*? How have these interconnections been altered by the transformation of landscapes and traditional knowledge resulted from settler colonialism and environmental crises?

While this dissertation builds on mixed methods situated at the convergence of ethnography and ecology, the methodology has been tailored to align with decolonizing research practices appropriate for a thesis developed in collaboration with Indigenous peoples and centered on Indigenous Knowledge. These include the adoption of traditional storytelling, *juoiggus* and sound art as media complementing academic writing to provoke changes in forms of scholarly publication and modes of knowledge co-creation that resonate with alternative knowledge systems. As a concrete manifestation of this methodology, the manuscript is accompanied by the audio-anthology *Muitalusat guldaleami birra – Histories of listening from Sápmi*, a collaborative artistic research project that serves as a multimedia output for the thesis and a means of returning the collected knowledge and sound recordings. The audio-anthology weaves together a plurality of listening experiences and soundscape compositions from Sápmi, integrating the contents of the dissertation while delving into the notion of ‘more-than-music’.

Abstrákta

Áddet mii rehkenasto “musihkkan” ja “jietnan” molsašuddá miehtá kultuvrraid. Lihkká geavahuvvojit dát tearpmat njuolgot akademalaš oahpuin gažakeahtta. Dát sáhtta badjelgeahččat dan rikkis girjjášvuoda main báikkálaš vugiin lea, šládjet ja vásihit jiena. Dutkkus guorahallá kritihkalaččat gusket go dát viiddis akademalaš definišuvnnat Sámi akustemologiiide. Dat introdusere ođđa konseapta vuodđuduvvon eamiálbmoga jietnamáhttus.

“Eanet-go-musihka”-jurdda hástala etno-antroposentrálaš govvidusa jietna-dilálašvuodain miehtá iešguđetlágan servvodagaid ja birrasiid mat ihtet akademalaš digaštallamiin. Dan sadjái dat deattuha dárbbu gudnejahttit ja oahpat báikkálaš oahppovuogádagain, ja maiddáid fátmmasta sihke olbmo ja eará elliid jienaid. Vuoi ahte dát suokkarduvvo, lea dutkosa guovddáš juoiggus – Sápmi eanet-go-musikála – albmanahhtin mii ovttaštahtta olbmo čájálmasa ja estetihkka ovttaš jienaiguin eará elliin, fágain ja ealli birrasiin. “Eanet-go-musihka”-dutkan ii leat dušše teorija muhto maiddáih lahkoneapmi áddet Sámi echovuogádaga, iežaska biokultuvrralaš mánggadafohasas. Dát mielddisbuktá metodologija “guldalit” eatnamiin, vuoi oahpá dan “sonic”:a gaskavuodas gaskal Sámi indiviid, servvodaga ja birrasa. Dát oahppanvuohki veahkeha guorahallat sávuhahtti ja eahpesávuhahtti kvaliteahtta iešguđetlágan jienain, mii deaivida váikkuhusa koloniála “extractivisma”:s ja dan rašes árktalaš ekovuogádaga dálkkádatrivedama ja mielddisbuktá árvvoštallamiid guoddevaš jietnaárbbi práksisiin.

Dutkos čuovvu čuovvovaš dutkangažaldaga: Mo sáhtta juoiggus geahčaduvvot dego “eanet go musihkan”? Maid sáhttit mii oahpat vuogis mo sápmelaččat čatnasit jienaide ja báikkiide juoigama bokte? Mo leat dát dilálašvuodas rievdan koloniserema ja birrasa hediid geažil? Mo veahkehit mitalusat bisuhit ja juohkit sonic:a máhttu, ja mo veahkeha guldalit eatnama hábmet mo sápmelaččat mitalit guldaleami birra? Maid sáhttet sámi guldalan práksisat min oahpat jiena birra otná máilmmis mii lea rievdadusas?

Dutkos geavaha iešguđetlágan vugiid ethnografijas ja ekologijas, čuovvodettiin etihkalaša guorahállan práksisiid mat gudnejahttet eamiálbmoga máhttu. Čálalaš guorahallama lassín, fátmmastuvvo sámi mitaluapmi, juoiggus, ja jietnadáidda vuohkin čájehit máhttu vugiid mielde mat mannet árbevirrolaš teavsttaid miehtá. Oassin dán lahkoneamis, lea jietnaprošeakta Mitalusat guldaleami birra veahkkin dutkosii. Dát čoakkálmus jietnabáddemiin ja mitalusain guosuhuvvo sihke kreatiivvalaš dutkamušán ja vuohkin addit ruovttaluotta máhttu fátmmastuvvon searvevuodaide. Dán bokte čatná dutkos oktii mángga iešguđetlágan guldalanvásáhusaid, ja čiekŋuda “eanet go musihkka” áddejumi.

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insights, as a Sámi researcher, musician and producer, have been invaluable and are featured in these pages.

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Bologna, February 2025

Nicola Renzi

Multimedia

QR code and shortlink to access the Audio examples mentioned in the thesis



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- Audio 2: Johan Mäarak – Biegganjunni
- Audio 3: Wimme Saari – Biegganjunni
- Audio 4: Nils Aslak Valkeapää – (Ei Sanoja) [Biegga luohiti]
- Audio 5: Seppo Paakkunainen – Humadii, duoddarat juige
- Audio 6: Geophonic measurements of wind turbine T9
- Audio 7: Mai Britt Utsi – Čuoika luohiti
- Audio 8: Audio mosaicking of mosquitoes and čuoika luohiti
- Audio 9: Wimme Saari – Mohtorgielká luohiti

<https://bit.ly/3AAqByW>

QR code and shortlink to access the audio-anthology *Muitalusat guldaleami birra*



<https://bit.ly/3OoQbQP>

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Per S...
Questa volta festeggiamo insieme.

Introduction

*Luohti lea eanet go musihkka
Luđiiguin olbmot diehtalit gaskaneaset
Luohti lea gulahallanvuohki maddái luonddogáhppalagaiguin¹
(Skaltje 2005: 213)*

This dissertation is about something more than music. Within dominant academic frameworks, the challenge of defining music across cultures has long been a central concern in ethnomusicological and anthropological research from the outset of these fields. Top-down applications of this concept often remain unquestioned, affecting the rich plurality of local classifications for diverse sonic practices and experiences, along with their associated bodies of knowledge. Novel pathways advocated at the intersection of ethnographic and ecological research have promoted ‘sound’ as overarching paradigm to challenge music exceptionalism and sustaining a comprehensive exploration of the roles that sounding relationships play across different societies and environments (from different onto-historical-political directions: Feld 1982, 2004; Ochoa-Gautier 2014, 2016; Sakakeeny 2015; Brabec de Mori 2015; Wong 2017; Meizel, Daughtry 2019; Titon 2021). Nonetheless, the transition towards a more inclusive concept has not been without criticism, protracting the risk of oversimplifying the complexities of underlying onto-epistemologies while disregarding the agencies of both human and other-than-human beings (Novak, Sakakeeny 2015: 6; cf. Brabec de Mori 2013; Ochoa-Gautier 2016; Robinson 2020). This dissertation does not aim to redefine the macro-categories of ‘music’ and ‘sound’, nor does it seek to replace them all in all with more comprehensive alternatives. Instead, it critically examines the pertinence and relevance of terms like ‘music’ and ‘sound’ contextually to research involving Sámi acoustemologies, with the goal of fostering the bottom-up emergence of a paradigm derived from and informed by Indigenous sound ontologies: more-than-music.

As a Sámi theoretical framework for categorizing sound events that bridge human performativity and aesthetics with the expressions of other-than-human subjectivities and animate environments, more-than-music attunes to Indigenous

¹ “*Luohti* is more than music / With *luodit*, people communicate between each other / And *luohti* is a form of communication with other organisms as well”. All translations not otherwise credited are my own.

values and decolonizing research practices respectful and responsible towards both lands and Indigenous knowledges.² The very bottom-up nature of this concept – first introduced as ‘*eanet go musihkka*’ by prominent Sámi filmmaker Maj-Lis Skaltje (2005) in the passage that serves as thesis’s epigraph – underscores the urge to learn from and validate the sovereignty of Indigenous theories to acknowledge both the complexity of local onto-epistemologies and the agencies of human and other-than-human beings in academic research practices.

To measure the validity and applicability of the ‘more-than-music’ paradigm, this study centers on the vocal practice of *juoiggus*. While ethnographic literature historically divested *juoiggus* of any other-than-human agency – defining it as an exclusively human/cultural heritage – Sámi onto-epistemologies highlight how this tradition transcends human exceptionalism, characterizing a biocultural heritage that is shared among the Sámi and other Earth beings inhabiting the northernmost regions of continental Europe (see ‘Juoiggus’). Adopting a biocultural approach, this study traces connections between Sámi acoustemologies and relational ontologies where other-than-human beings and the Land cannot be separated from the socio-cultural sphere (Descola 2005; Viveiros de Castro 2007; Kassam 2009; Helander-Renvall 2010, 2016; Hong et al. 2014; Virtanen et al. 2021). In this dissertation, I lean towards the idiom ‘other-than-human’ over ‘more-than-human’ and ‘non-human’ when referring to entities that are not *Homo sapiens*. This choice stems from the contextual recognition, in Sápmi, of an ontological equity between all Earth beings. Within this equity, however, there is no ontological continuity between human beings [*olbmot*] and subjects that are not human – flora, fauna, rivers, wind, rocks, snowmobiles, spirits, deities, and other incorporeal entities – which are nonetheless acknowledged as ‘beings’ [*eallimat*] but with own autonomous existence from *olbmot*. With few contextualized exceptions, I chose to avoid the term ‘non-human’, as it categorizes animals, plants and other beings simply in the absence of humanness, implicitly reinforcing human-centered exceptionalisms and hierarchies I seek to avoid replicating. The idiom ‘more-than-human’, notably prevalent in environmental humanities, emphasizes that the world is richer and more complex than just the human experience. However, like ‘non-human’, the concept of ‘more-than-human’ syntactically subtends a hierarchy, suggesting all human societies are somewhat *less* deserving that beinghood than other entities. As such, when applied to Sámi worldviews, ‘more-than-human’ fails to capture the horizontal co-existence of *olbmot* and other *eallimat*, which is better

² Following Indigenous Protocols of research production that counter the conventional writing style guides, within these pages I capitalize the term Indigenous as a way to appropriately honor the weight of identities, cultures and histories that have long been objectified, diminished and erased (Younging 2018). The same applies to the related bodies of knowledge and the Land. Lowercase “indigenous” is reserved for cases where the word does not refer to Indigenous people in any sense (i.e., indigenous animal species, plant).

reflected in the term ‘other-than-human’.³ In this perspective, other-than-human beings refers to biotic and abiotic subjects with own autonomous existence, rights and ways of being, that stand on equal footing with humans in a decentralized, egalitarian beinghood. Finally, the term ‘Earth beings’ serves, in this thesis, as an inclusive concept that encompasses all the categories mentioned above within a kinship that relates them all to the Land in an interdependence of co-living and co-knowing.⁴

In addition to reflecting the homonym Sámi paradigm and announcing the thesis’ focus on the *juoiggus* biocultural heritage, “more-than-music” in this dissertation’s title signals a broader scope that transcends conventional theoretical and disciplinary boundaries of studies on sound and music. More-than-just ‘music’, this work addresses – from an exquisitely auditory perspective – ecological knowledge and landscape practices, multispecies ethics and storytelling, colonial histories and environmental sustainabilities. It serves as a *literal* call to engage with what I termed Sápmi ‘echosystems’ in their full complexity of sonic relationships.

While the concepts of ‘acoustemology’ and ‘history of listening’ – among the ones specifying the thesis’ subtitle – have long consolidated in the academic disciplines (Feld 2015a, 2015c; Rice 2018; Mansell 2021), I define the remaining ‘echosystem’ (a wordplay between “echo” and “ecosystem”) as a complex network of sonic relationships, reciprocities and biocultural values that develop over time within a defined area, involving all living organisms, the abiotic elements that characterize it, and the ways they influence each other.⁵ In this study, the concept of echosystem emerged from the inadequacies I encountered with the concept of ‘soundscape’ (Schafer 1977); a concept still leading, often uncritically, the literature on sound and music ecologies. Thus, the counter-formulation of echosystem started with a critical reassessment of Schafer’s concept.

Criticisms of the soundscape approach arise from multi-angled perspectives, primarily addressing the concept’s original bias as being molded around a ‘retinic paradigm’ (*-scape*) that has led to privileging visual-centered categories over the sonic experience (Solomos 2018: 102; cf. Colimberti 2004; Calanchi 2015; Rice 2018).⁶ According to Farina, if landscapes are considered a complex space encompassing all information perceived by an organism – including sounds as an integral part – «there is no need to invoke the concept of a soundscape; however,

³ I use the term ‘more-than-human’ when writing about entities that Sámi ontologies recognize as *olbmot*, although their sociality pertains to other realms of the physical world, such as incorporeal entities like *gufihttarat*, *ulddat*, *háldit*, other chthonic peoples and spirits of ancestors.

⁴ For a comprehensive overview of the history of these terminologies, I refer to Abram (1996), Viveiros de Castro (2007), Santos-Granero (2012), Weheliye (2014), de la Cadena (2015), Puig de la Bellacasa (2017), Price, Chao (2023).

⁵ Notably, however, notions of biotic and abiotic must be evaluated in relation to different biocultural contexts as, for example, they do not hold in Sámi ontologies in the same way they do within dominant scientific frameworks.

⁶ Symbolically, the North Sámi term for soundscape – *jiethagovva* – translates as “sound image”.

if we consider landscape solely as a visually perceived component, then the soundscape becomes something to integrate» (Farina 2015: 38).

Ethnomusicologists Novak and Sakakeeny offer a counter narrative of the soundscape, cautioning on Schafer's work as channeling academic Sound Studies toward a knowledge production rooted in a hegemonic and normative epistemology, which denies «the constitutive differences that participate in the 'soundscape' as a multivalent field of sounds with divergent social identities, individual creativities and affordances, biodiversities and differing abilities» (2015: 7). Similarly, to Indigenous and ecofeminist sonic scholarship, the Schaferian soundscape informs a "hungry" listening that consumes Indigenous and marginalized epistemologies, imposing listening positionalities structured to reinforce dominant ecologies and aesthetics while ignoring or silencing non-dominant values, affects and knowledges (Robinson 2020: 51; cf. Kanngieser 2023).

Ingold's eco-anthropological theories were instrumental in shaping the definition of echosystem, as they align well with relational and biocultural ontologies like the Sámi perspective consulted here. In Ingold views individuals, communities, and their knowledge and skills as contingent upon a network of relationships actively established through interaction within a dynamic environment. The relational complexity between organism and environment on an acoustic level, hence, emerges through multiple, reciprocal layers of communication (Ingold 1996: 62). Furthermore, Ingold critiques the notion of soundscape as it tends to objectify sound, positioning it as the *object* of perception rather than as one of the sensuous *means* through which we perceive, relate to, and make sense of our surroundings (Ingold 2007: 10-11). In turn, the preference for 'echosystem' over the more established notion of 'soundscape' also stems from soundscape's inherent static quality, suggesting an ideally detached auditory environment positioned before a passive listener. As Steven Feld has underscored, soundscape fails to adequately represent the experience of sound as a product of dynamic and participatory interaction between subjects and an equally dynamic, interactional and ever-changing environment (Feld 1996: 97). Based on the findings presented in the following chapters, Sámi ways-of-listening foster reciprocities of being, knowing and doing, making echosystem an especially compelling framework for accommodating these Indigenous acoustemologies.

A biocultural approach to the study of echosystems necessarily entails a posture of *listening-with* Earth and Indigenous acoustemologies, where each informs and shapes the other. In the search for a methodology to foster and stimulate this approach, a multimedia collection of echosystems and related histories of listening was co-designed with research participants. This collaborative effort was aimed at engaging and learning from sonic reciprocities between individuals, communities and the land, where sounds – moving beyond mere acoustic signals, enriched with

biocultural values – are presented and returned through multimodal storytelling. Consequently, this study employs dialogic methodologies as much as it concerns them. It is primarily informed by *field recording*, an emerging quanti-qualitative method that brings sound-centered research into transdisciplinary dialogue concerning peoples and environments (Feld 2013; Lane, Carlyle 2013; Benson, Montgomery 2018; Bruyninckx 2018; Wright 2022; Erbe, Thomas 2022). It is relational and crisis-oriented; hence it engages with contemporary local and global issues. However, standard field recording practices have often adopted a conservationist attitude that rarely consults Indigenous acoustemologies and is frequently driven by dominant paradigms of environmental sustainability, which risk conflicting with or silencing Indigenous worldviews (Feld 2013; Wright 2022; Kanngieser 2023). Therefore, as the project embraces Indigenous lands and onto-epistemologies, it was essential to critically deal with decolonizing and indigenizing methodologies (Tuhiwai Smith 1999; Kovach 2009; Wilson 2013; Virtanen et al. 2021), and particularly Sámi protocols (Kuokkanen 2000; Porsanger 2004; Hirvonen 2008; Guttorm 2011; Guttorm et al. 2021; Finbog 2022), which emphasize participatory, community-based methods, empowerment agendas for self-determination and politics of representation, while often encouraging a listening beyond human exceptionalism and nature-culture divides. After describing the relevancy and application of Indigenous methodologies within this dissertation (see ‘Listen with, care’), this manuscript also advances their transformative potential in academia by presenting an audio-anthology co-designed and dialogically edited with research collaborators, in support to the idea that the responsible co-production of research can facilitate a symmetrical, mutually beneficial and contextually relevant production of new knowledge (see ‘Muitalusat guldaleami birra’). The audio-anthology serves both as a method, a primary source and as an integral output of the research. Included in this manuscript as a digital and transcribed appendix (see ‘Appendix II’), the audio-anthology not only complements the dissertation as a multimedia result but also reflects its core content through plurilingual and art-based expressions that make it accessible beyond academia and, notably, to the Sámi communities where the knowledge was originally shared (cf. Feld 2021; Lewy, Brabec de Mori 2023). In doing so, it also aspires to initiate a process of restitution of the collected materials and the bottom-up heritagization of the echosystems it brings together.

Broadly, this dissertation structures over two macro-sections. The first expands on this ‘Introduction’ and starts from setting the socio-geographical stage where this study was performed (see ‘Sápmi’). It continues filling the gaps in academic research dealing with *juoiggus*, centering on established Sámi scholarship, integrated with oral teachings shared with me during fieldwork (see ‘Juoiggus’). By familiarizing with heterogeneous definitions that associate *juoiggus* with an ecosystemic network, with acoustemological paradigms and with histories of listening, this subsection seeks to preventively address this thesis’ leading research

question: how can *juoiggus* be explained as something more-than-music? Following this theoretical and counter-theoretical foundations, the anticipated subsections ‘Listen with, care’ and ‘Muitalusat guldaleami birra’ unpack and delve deeper into the methodologies that guided my fieldwork and writing. Abundant pages are devoted to the description of the audio-anthology and to illustrate how this seemingly collateral project closely interacts with this text, aiming to address another pivotal research question: How can stories facilitate the verbalization and transmission of sonic knowledge and memories?

Presenting preliminary answers to research questions within the introductory chapter of this dissertation may appear unproductive within a traditional linear academic narrative that leads the reader to answers in the conclusions; however, this choice is intentional, aimed at introducing foundational theoretical insights that serve as groundwork for the case study analyses that follow, where these insights are propaedeutic for comprehension but are also “tested” in practical contexts. After establishing this extensive theoretical foundation and detailing the multi-modal methodology, a transitional paragraph (see ‘Bohccuin’) situates the rationale behind selecting specific ecosystems and subjectivities that comprise the case studies of this dissertation – I. *Biegga*, II. *Čuoika*, III. *Mohtorgielká* – thereby outlining the structure of the discussion, which forms this work’s second macro-section.

In the discussion, the three case studies – each bringing forth its own criticalities and idiosyncrasies, yet all interconnected by a shared ecosystem that sets the tundra in motion – test the theoretical and methodological foundations of this dissertation, aiming to answer the final set of research questions: What can we learn from the sonic reciprocities between individuals, communities, and the Land by listening-with *juoiggus* across human and other-than-human voices? The biocultural nature of *juoiggus* – explored within each case study – invites transdisciplinary and ethical questions, such as: How can we deal with conservation and heritagization practices when confronted with contrasting and disputed sound ontologies? Who has the right to assign values to ecosystems as collectible and heritagizable objects? How to integrate voices beyond the human – including abiotic and technological subjects – as equal stakeholders in this heritagization? How have these more-than-musical and ecosystemic reciprocities been altered by the transformation of landscapes and ecological knowledge resulted from the joint settler colonialism and environmental crises?

Sápmi

Imagine silence. Not a sound disturbs the silence of a dark autumn night. In the dark sky there is a pattern of stars. A circle of light slowly twists round and round. In the horizon the timid northern lights restlessly move to and from, searching, roaming about. It is so quiet that you imagine a sound to accompany the falling star. The northern lights seem to moan at the edge of the mountain. (Kuoljok, Utsi 2015: 6)

Approximately 20,000 years ago, during the Weichselian glaciation, only a few peaks and ranges emerged from the three-kilometre-thick ice sheet that blanketed the northernmost region of Fennoscandia (Isaksen 1998: 55; cf. Kuoljok, Utsi 2015). The wind, *biegga*, moved solitary through rock cracks, crevices or around cliffs animating high-pitched whistles and deep hums. Fine particles of ice and dust are also blown against rocks, creating a subtle scraping sound. These sporadic sounds would stir *háldit*, *gufihttarat* and other underground beings, who occasionally surfaced to tune their voices with the howling of the wind. This time, however, they hear a startling sound – the gentle tapping of rain, a sound that had not been heard for a long time. Nearly imperceptible murmurs and crackles reveal that the ice is beginning to thaw. A sharp rise in temperature initiated a gradual northward retreat of the ice, which culminated around 9,000 years ago, when the northern coastline was fully exposed and the last vestiges of the ice sheet concentrated in the Sarek Mountains melted away (Andersen, Mangerud 1989). Glaciers cracked loudly, while in the basins a sporadic trickling developed into a roar, as meltwater rivers carved through the ice, cascading over rocks. As the ice edge retreated, a more diverse life began to populate the region. On land, lichens and plants slowly spread, with the dwarf birch (*Betula nana*) being one of the first and most resilient tree species to re-establish in the newly exposed terrain (Nota et al. 2022; cf. Skaltje 2005). The soil, finally absorbing liquid water, lets out shy sighs and squelches, while the landscape comes alive with a whole new spectrum of sounds as *biegga* interacts with leaves and branches. Once the surface became ice-free, the thawing of the upper layers of permafrost created seasonal bogs and ponds, supplying water sources that compensated for the tundra's low precipitation. These wetlands fostered suitable habitats for highly adaptable species, including mosquitoes, midges, and flies (*Diptera: Culicidae*; *Diptera: Simuliidae*), which thrive in these seasonal environments. Novel acoustic niches develop in the fluctuation between warm and cold seasons. Lakes and watercourses formed, providing both stable and transitory habitats for fish, while the inland and coastal regions of Northern Fennoscandia became crucial stopover and breeding ground for a large variety of migratory birds. A complex and vibrant eco-polyphony now marks each time of the polar year. In late autumn, as the cold set in, the ice on lakes and rivers forms “tuned by the temperature”, and in tightening it produces thunderous, sustained pings (Schafer 1977: 20). Even during the long, dark winter, when the memory of the

silent ice age seems to resurface, the land remained filled with a plurality of voices, making the distinctive quietude of the region rich and diverse. Reindeer (*Rangifer tarandus*) and moose (*Alces alces*) were among the first mammals to migrate in search of new grazing areas and migratory routes, followed closely by their predators, including wolves (*Canis lupus*) and brown bears (*Ursus arctos*). These renewed ecosystemic conditions also attracted groups of hunter-gatherers who followed the retreating ice edge. The precise origins of these first people remain elusive and a delicate subject of ongoing debate. However, it is widely believed that, over thousands of years, one branch of these populations laid the ancestral roots for what is today known as Sápmi.⁷

The term Sápmi is indicator of a geospatial and culturally defined area that latitudinally stretches from the coasts of the White Sea to the fjords of the Atlantic Ocean, while longitudinally it reaches across the Barents Sea and the Baltic Sea. Sápmi is the ancestral and unceded land of the Sámi, the descendant of the first human group arriving in the region.⁸ As a result of a descent, historical existence and identity that is distinct and precedes the subjugation to the states now enveloping them, the Sámi are the only Indigenous people officially recognized in continental Europe (Figure 1).⁹

The Sámi found a music in the tones of the wind, streams and birds (Skaltje 2005). They learned and inherited it from the *gufihttarat* (Turi 1910), soon realizing that what they heard was something more than just music;¹⁰ it was

⁷ For a critical review of the pertinent historiography, I refer to Aikio (1992); Hætta (1993); Seurujärvi-Kari (2000); Lehtola (2002); Skaltje (2005); Broadbent (2010); Hansen, Olsen (2014); Kuoljok, Utsi (2015).

⁸ The first written accounts mentioning the presence of Sámi in the area date back to *Germania* (98 AD), where Tacitus describes them as the sole inhabitants of those remote lands.

⁹ The Sámi homeland stretches across the borders imposed at different times in history by Norway, Sweden, Finland and Russia. It spans approximately 300,000 square kilometers, predominantly north of the Arctic Circle, but extending as far south as 62°N along the Norway-Sweden border (Svähken sijte). Despite this fragmentation across four sovereign states, the Sámi emphasized unity in 1986, declaring: « We, Saami are one people, united in our own culture, language and history, living in areas which, since time immemorial and up to historical times, we alone inhabited and utilized» (Sámi Political Program 1986). Indigenous parliamentary bodies (Sámedikkit) exist in each Fennoscandian state, while the Sámi Council (Sámiráđđi), as an NGO, maintains communication with the Russian side as well. This collective and unified identity coexists with a mosaic of linguistic and cultural diversity, sharing common resources and histories of colonization and resistance. The linguistic groups are commonly divided into Davvisámegiella (North Sámi), Julevsámegiella (Lule Sámi), Bihtánsámegiella (Pite Sámi), Ubmisámegiella (Ume Sámi), Lullisámegiella (South Sámi), Anárašgiella (Inari Sámi), Nuortalašgiella (Skolt Sámi), Áhkilsámegiella (Akkala Sámi), Gielddasámegiella (Kildin Sámi), and Darjjesámegiella (Ter Sámi), which are also geographically defined. Davvisámegiella, the most thriving and widely spoken of these languages, has been adopted as a sort of standard across Sápmi in media, literature, art and research. In this dissertation, unless specified otherwise, I primarily refer to a North Sámi lexicon. With a population estimated between 50,000 and 100,000 (no formal censuses based on ethnicity exist), approximately 55 percent of the Sámi live in Norway, 30 percent in Sweden, 10 percent in Finland and less than 5 percent in Russia. A notable Sámi diaspora also exists in the USA (Jensen 2012). The official recognition of the Sámi as an Indigenous people under ILO Convention 169 came only after centuries of forced assimilation and colonial struggles, a testament to their sustained resistance for identity and socio-bio-cultural survival.

¹⁰ Ánde Somby, oral teaching (personal communication), May 19, 2021, Sirbmá, Sápmi.

something that connected them to the vast sonic ecosystems (hereafter ‘echosystem’) of the region, transcending space and time in a kinship across all Earth beings. Then settlers came. They arrived with borders – both geographical and ontological – that overimposed, overlapped and changed again, colonizing lands, bodies and minds, ultimately fragmenting communities and kinships beyond human.¹¹ Settlers and borders plunged the region into silence, and centuries passed before colorful garments and ancestral melodies could be heard aloud once again in the villages (Bjørklund 2000).¹² Although these melodies resounded through the forests, in the voice of wind and rapids, or echoed through the rocks in the voice of the underground beings, they were forbidden and brutally punished when voiced by people. The settlers could not hear *juoiggus* in the environment because for them it was just music – something to them inherently cultural and separate from nature. But *juoiggus* «survived long, harsh winters», passed down in secrecy in the *meahcci*, among many families and through environmental listening.¹³

By the latter half of the last century amidst broader struggles for self-determination and cultural reawakening (Valkeapää 1971 [1983]; Helander 1996; Gaski 1997; Bjørklund 2000; Lehtola 2002; Hirvonen 2008; Kuhn 2020), *juoiggus* reclaimed its public life, even taking on central roles in the Indigenous resistance (Helander-Renvall, Kailo 1998; Jones-Bamman 1993; Renzi 2019, 2022). Within these societal transformations and as a result of an inevitable process of globalization, a portion of *juoiggus* underwent a radical refunctionalization, transitioning into staged performances and artistic works, ultimately claiming its place as a musical genre known as ‘modern joik’ [*ođđa luohti*] (Renzi 2019, 2021b). Yet, *juoiggus* as something more than music survived, despite the concerns of settler collectors and lappologists who continued to record and transcribe this heritage solely as a cultural expression (Skaltje 2005). At the same time, new kinships formed within the ancestral echosystems of Sápmi, and machines like snowmobiles and all-terrain vehicles (ATVs) – more notably than other technological companions – participate today in the performance of *juoiggus*. However, other machines driven by colonial ideologies, violently disfigure Eana [Earth], her mountains, forests, rivers, fjords, or disrupt the winds that have, since time immemorial, animated and given voice to every feature of Sápmi. While *juoiggus* today sounds loud and thriving in the voice of the Sámi people, other-than-human voices are turning more and more silent. The stories shared within this dissertation speak to ears that may not yet realize how heritage can be shared across both human and other Earth beings, revealing how colonial extractive industries are once again threatening a vital expression of the biocultural heritage of *juoiggus*.

¹¹ For an overview of the history of the colonization of Sápmi, the primary references are Svonni (1974), Aikio (1992), Minde (2003), Lindmark (2013), and Kuhn (2020).

¹² For an overview of the repression of *juoiggus* in the colonial and religious encounter, a selected Sámi literature comprises Skaltje (2005), Hirvonen (2008) and Prost (2022). Further primary references here are Rydving (1991), Jones-Bamman (1993), Graff (2004, 2016).

¹³ Mona Solbakk, oral teaching (personal communication), August 14, 2019, Kárášjohka.

Juoiggus

...as echosystem

More commonly referred to in scholarly literature by the non-Sámi term “joik”, *juoiggus* is the more-than-musical heritage of Sápmi.¹⁴ It is a highly sophisticated vocal tradition (*jietna árbevierru*) shared among the Sámi and other-than-human beings inhabiting the northernmost regions of continental Europe. As such, it can be regarded as a biocultural heritage, since it does not operate within a nature-culture divide that is alien to Sámi ontology. In this framework, *juoiggus* can be understood as an echosystem, or a sonic network formed through performance, connecting individuals, communities and places. Every node in this network – whether a person, animal, place, event, or anything contributing to the vitality of Eana (Earth) – can be *juoiggalmas* (the source of *juoiggus*). Similarly, any node can be *juoigi* (pl. *juoigit*; the performer of *juoiggus*) (Skaltje 2005: 255; cf. Buljo 1998). The link between two nodes in this network is known as *luohti* (pl. *luodit*),¹⁵ representing the vivid sonic presence of the *juoiggalmas* as captured and interpreted in the voice of the *juoigi* (Figure 2). For this reason, there exist *luodit* of persons (*persovdnaluodit*), animals (*ealliluodit*), landscapes (*báikeluodit*), wind (*bieggaluodit*), scooters (*mohtorgielkáluodit*), and so on. A *luohti* comes to the ear in the shape of a defined rhythmic-melodic formula, whose specific morphology ideally conveys the identifying essence (*luondu*) of the *juoiggalmas* through an agile combination of vocal skills (Graff 1993: 399; Skaltje 2005: 286).¹⁶ Verses

¹⁴ In this dissertation, I prioritize and adhere to the Indigenous lexicon related to *juoiggus*, anglicizing only its verbal conjugations (e.g., ‘she joiks her grandfather’, ‘they joiked the wolf’, ‘the wind is joiking’, ‘he knows how to joik’) for the sake of readability and syntactic coherence.

¹⁵ *Luohti* is the denomination pertinent to the North Sámi language and cultural region. Other denominations expressing the same notion – although it takes on different forms and contents – can be found throughout Sápmi: *luvvt* / *лыввѣт* (in Kildin Sámi), *leu'dd* (in Skolt Sámi), *livde* (in Inari Sámi), *vuolle* (in Lule and Pite Sámi), *vuöllie* (in Ume Sámi), and *vuelie* (in South Sámi).

¹⁶ It is stimulating to advance an etymological hypothesis on the connections between *luohti* and “*luondu*” – a word that many dictionaries improperly translate with ‘nature’, as category distinct from culture. *Luohti* and *luondu* share the root ‘luo-’, whose proto-Finnic etymology relates to the action of creation, ‘to bring into existence’ (*luoda*, in today’s Finnish), which coincidentally is also one of the essential scopes of *luohti* (see below). Beyond these etymological parallels, however, it is important to note how in the Sámi languages there is no single word for ‘nature’, as this category is alien to Sámi ontologies (Østmo and Law 2018: 354; cf. Joks et al. 2010). The term *luondu* is rather «an old Sámi word, which has earlier been used in the meaning of the nature or character of some people, animals, or plants. In everyday Sámi language use, it has nevertheless established its place as a word for “nature”» (Guttorm 2021: 237; cf. Eikjok, Birkeland 2004, Helander-Renvall 2010). This deeper etymological layer reveals further entanglements between the concepts of *luohti* and *luondu*, where *luohti* is the sonic essence (or character, or nature) of a certain person, animal, place, and so on. My thesis supervisor and Sámi scholar Hanna Guttorm, along with several *juoigit* throughout fieldwork, have described to me the idea that listening to a *luohti* coincides with listening to the *luondu* of the *juoiggalmas* (Hanna Guttorm, Oral teaching (personal communication), September 20, 2022, Eanodat; Johan Sara Jr., Oral teaching (personal communication), April 29, 2021, Máze; Mathis Eira, Oral teaching (personal communication), June 20, 2023, Guovdageaidnu;

(*dajahus*; pl. *dajahusat*) and transrational words blended together with the *luohti* also contribute to the one of the primary purposes of *juoiggus*, to make something or someone present (Hirvonen 2008; Hilder 2015; Aubinet 2020a).

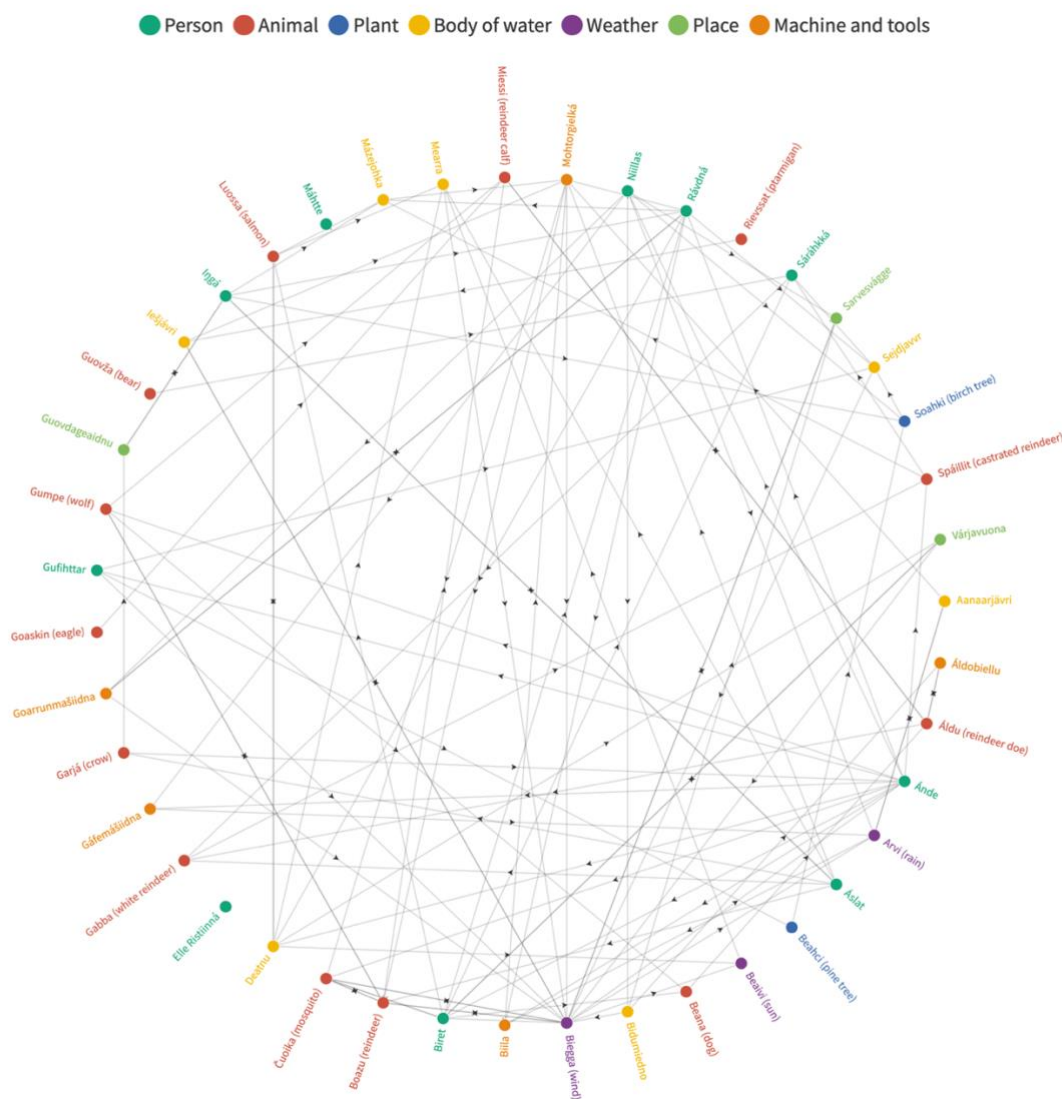


Figure 2 Graphic representation of a fraction of the broader *juoiggus* echosystem: each point can be *juoiggalmas* and *juoigi*. The link between two or more points is the existing sonic relationship between them, which acoustically manifests as a *luohti*. Arrows indicate the direction and multidimensional flow of *juoiggus*, making explicit who is the *juoigi* and who is the *juoiggalmas* within a given link. For clarity, I have color-coded the subjectivities into distinct groups – a convention rather than a rigid classification, intended to loosely mirror the broad categories of *luodit* shared with me by fieldwork collaborators.

While *juoiggus* can certainly be labeled as a music tradition (*árbemusihkka*), and such has been narrowed down for centuries of ethnographic descriptions, its

Mai Britt Utsi, Oral teaching (personal communication), July 3, 2023, Guovdageaidnu; Berit Alette Mienna, Oral teaching (workshop), July 15, 2023, Olmmáivággi; Ingor Ántte Áilu Gaup, Oral teaching (personal communication), August 15, 2023, Guovdageaidnu). Therefore, building on this ontology, it is not unreasonable to hypothesize connections between *luohti* and *luondu* that persist beyond lexical and structural etymology.

definition extends beyond what is conventionally intended as music, and the act of joiking (subs. *juoigan*; verb *juoigat*) cannot be simply equated with singing or chanting (*lávlu*). Although this distinction «may be subtle and difficult to describe» or fully digest from the point-of-listening of dominant sound ontologies and acoustemologies (Hämäläinen 2023: 18), the semiotic dimension of *juoiggus* clarified by its practitioners and knowledge holders suggest that there is a deeper, more nuanced understanding. A paradigmatic and introductory definition comes from one of the most renowned ambassadors of *juoiggus*, Nils-Aslak Valkeapää (Áillohaš), who asserts:

Yoik wasn't music – or rather, it wasn't only music. It was part of life, it was the friend one was joiking, [...] it was the grey lead-reindeer with the smart trot, or the summer dwelling place, in all its radiant beauty. But you didn't yoik about somebody or something, you yoiked them. (Valkeapää 1979: 27; cf. Ragazzi 2012: 9)

Sámi professor Harald Gaski similarly reflects on the «direct connection» established through the *luohti* between *juoigi* and *juoiggalmas*, where the *luohti* «is closely connected to the referential object in an indissoluble relationship» (Gaski 1999: 16), while prominent *juoigi* Ánde Somby stretches this semiotic boundary even further, reaching beyond the subject-object dualism to emphasize the reciprocal nature of *juoiggus*:

Yoik is distinguished from the western European notion of singing in several ways. For instance, one does not yoik about someone or something, but one simply yoiks someone or something. In a manner of speaking, a yoik has no object. In fact, it is altogether impossible to envision yoik in terms of subject and object. (Somby 1995: 17)

Juoiggus is, therefore, about the indissolubility of signifier and referent in the *luohti*. A *luohti* rendered through the skilled vocal abilities of a *juoigi* not only makes the *juoiggalmas* recognizable within the biocultural auditory context where the *luohti* stems from (Gaski 1999: 16), but vividly make the *juoiggalmas* present to the listener's ear (Figure 3). *Juoigi* and reindeer herder Lars Henrik Blind (Máreha Lásse Lárs Heaika) suggests this process as an act of bringing forth the *juoiggalmas* through the versatility of one's voice (*heivehallat*):

Jus gulat go soames rievssaha juoigá, don dego oainnát dan. Go biertna nai juoigá, elliid, don dego gulat diet lea dal diet. Gulat diet leat ráhpis eatnamat ja diet leat diekkár finna guolbanat. Dego oainnát makkár guovlu lea, gos diet luohti boahtá.¹⁷ (in Skaltje 2005: 258-259)

¹⁷ “If you hear someone joik the ptarmigan, it's as if you see it. Or when one joiks the bear or another animal, you can hear which animal it is. You also hear when it's on rugged or nice terrain. You get an image of the place where the yoik originates.”

For Sámi percussionist and researcher Jakop Janssønn, *luohti* stands by itself as a self-sufficient sign, whose phenomenology therefore transcends the performative act:

The fact that you do not yoik about something, you yoik something, tells me about a norm of conceptualization that enters into a practice where yoik both demands and creates a space of consciousness for both the performer and the listener, while also standing firmly on its own as an entity. In this way, one can imagine that yoik has always existed as something of its own, like the earth, water, sky, and sun. (Janssønn 2024: 4)

In his story [*mutitalus*] shared within the audio-anthology *Mutitalusat guldaleami birra* (Appendix II.7), *juoigi* and actor Ingor Ántte Áilu Gaup (Áilloš) exemplifies the indissolubility of *luohti* and *juoiggalmas* by joiking *gumpe*, the wolf itself:



Mun juoiggan dan gumpe. I joik the wolf.
Ii mun juoike gumpe birra. I don't joik about the wolf.¹⁸



Figure 3 Creative schematization of the act of presencing through *juoiggus*: in this case, a human *juoigi* (on the left) gives voice to a *luohti* (pitch contour in the middle) that makes the *juoiggalmas* (the wolf on the right) present (Illustration generously contributed by Astrid Elizabeth Hakvaag).

Transposing this discourse to the *persovdnaluodit* [personal *luohti*] repertoire and borrowing once more Harald Gaski's words, «the yoik is not about a person, it actually is the person» (Gaski 1996: 13). Áilloš further elaborates on this reciprocity,

¹⁸ Gaup 2024.

offering insights that revolve around the distinctions between *juoiggus* and singing, yet extend the reciprocity to the immediacy of the feelings:



<i>Nu go dadjat “lávllut du birra”. Ainna</i>	People say they “sing about someone”.
<i>go lea musihkka, ja luohti maid leat</i>	And <i>luohti</i> is music, but it is also the
<i>duovdduidd giela.</i>	language of feelings.
<i>Jus mun daján mu eamidii, “mu</i>	If I say to my wife, “I love about you”...
<i>ráhkistan du birra”...</i>	It doesn’t really mean anything when
<i>Ii ne gal heive dadjat. [boagusta]</i>	said that way. [laughs]
<i>“Mun ráhkistan du”.</i>	“I love you”.
<i>Go luohti lea duovdduid giella, de lea</i>	Since <i>luohti</i> is the language of feelings,
<i>luonddulaš njuolgga dadjat “mun</i>	it is natural to say directly “I joik you”. I
<i>juoiggan du”. Mun liikon fiertui,¹⁹</i>	like transparency, I like a human
<i>mun liikon olmmoslašvuohtii.</i>	relationship.
<i>Da manná njuolga.</i>	It is immediate.
<i>Ii das leat mánga</i>	It doesn’t go around. It goes
<i>birrasa. Da manná váimmus váibmui.</i>	from heart to heart.
<i>Mun juoigan du.</i>	I joik you. ²⁰

On the intimacy and reciprocity of *juoiggus*, the *juoigi* Sara Marielle Gaup Beaska remarks that performing a *luohti* is «a gesture where all the attention is on the subject being joiked, because what people hear is not me, but who I am joiking. When I sing a regular song, instead, I feel a lot of pressure since all the attention is on me. It is a one-way communication from the stage».²¹ This framing highlights *juoiggus* as an eco-centric (or rather, de-centric) practice, in contrast to the more ego-centric nature of the subject-object divide that informs conventional definitions of song and singing traditions.

Another ontological discrepancy between *juoiggus* and established definitions of singing is that a *luohti* «has neither a beginning nor an end» (Somby 1995: 17; cf. Valkeapää 1971 [1983]: 60; Helander-Renvall, Kailo 1998: 77; Gaup 2009; Graff 2018: 47). Such an «open-ended and process-oriented nature» (Helander-Renvall, Kailo 1998: 1) contrasts with a linear idea of song, which typically would have a set opening and conclusion. Conversely, the looping nature of *luohti* allows to «join in at any moment and exit at any point» without compromising its structural integrity and expressivity.²² Musicological literature frequently described this looping nature in terms of circularity (Jones-Bamman 1993; Graff 2018), although with nuanced variations (Aubinet 2020b; Janssønn 2024). Ingor Ántte Áilu Gaup explains that this sense of circularity mirrors the cycles found in nature and is passed down from

¹⁹ Áilloš employs exquisite metaphorical language to discuss the transparency of genuine human relationships, using the term *fiertu*, which signifies nice weather or a clear view with no clouds obstructing it.

²⁰ Gaup 2024.

²¹ Sara Marielle Gaup Beaska, Oral teaching (staged performance), October 20, 2022, Venezia.

²² Sara Marielle Gaup Beaska, Oral teaching (staged performance), October 20, 2022, Venezia.

them: «Nu ahte *luohti* manná dego *luonddu johtá*».²³ Ánde Somby reiterates how «[a] western European song is usually considered to have a beginning, a middle and an end. A yoik, on the other hand, starts suddenly and stops just as abruptly», and adds how a *luohti* is certainly «circular rather than linear. However, even a circle is not an adequate graphical description of the structure of a yoik, because a yoik lacks the Euclidean symmetry of a circle» (Somby 1995: 17).

In this sense, the etymology of the Julivsámegiella term for *luohti*, “*vuolli*”, invites further investigation when compared to the davvisámegiella word “*vuolli*”, which refers to the downstream section of a river. The origin of “*vuolli*” can be traced to the Proto-Finnic root “*voō*”, meaning “stream” or “flow”, suggesting that the structure of Lule Sámi *vuolli* and, in turn, *luohti*, embodies a steady, looping, yet everchanging motion akin to the flux of a river (Sammallahti 1988: 542; cf. Aikio 2006; Koponen et al. 2008; see also Skaltje 2005: 283). This linguistic evidence would also mirror the idea – as expressed by Maj-Lis Skaltje – that «[l]uohti lea ožžon šuoŋaid jogaid jienain» (2005: 12).²⁴

The mentioned possibility to “join in” and “exit” at any point of this looping flux suggests another ontological exceptionality that outlines *juoiggus* as something more than music. Young *juoigi* and reindeer herder Mathis Eira suggests how *luohti* is not something that one creates: «they come to me – as *luohti* usually does to many people».²⁵ Comparably, Sara Marielle Gaup Beaska argues how in the traditional apprenticeship of *luohti*

we don’t say that we are composers or creators of *luohti* – even if maybe it initially came from me. Instead, we say that we catch them [*bivdit*] or set them, because we believe they already exist. They are out in the wind. And if you are joiking, you can catch them. You hear them there, and so you perform them. In a way, you are recording them. This used to seem a little strange to me, you know: how does it really work? I’ve tried to make it logical, but I realized that I should stop rationalizing it... because it just happens. I know it happens.²⁶

And again, from Mai Britt Utsi’s experience, «suddenly it can just appear – come into your mind. And it can “*borššui olggos*”, it can just flow out strong like a river. And you find yourself joiking without knowing where the sound came from».²⁷ All these reflections, rooted in ancestral knowledge, are poetically echoed by one of the

²³ “So that *luohti* goes like nature flows” (Gaup 2024).

²⁴ “*Luohti* got its note from the voice of the streams”

²⁵ Mathis Eira, Oral teaching (personal communication), June 20, 2023, Guovdageaidnu.

²⁶ Sara Marielle Gaup Beaska, Oral teaching (staged performance), October 20, 2022, Venezia; a similar teaching was shared with me during a *juoiggus* workshop led by *juoigi* Berit Alette Mienna, Oral teaching (workshop), July 15, 2023, Olmmáivággi.

²⁷ Mai Britt Utsi, Oral teaching (personal communication), July 3, 2023, Guovdageaidnu. One usually speaks of *luovvanit*, when the tones come loose, stirred by a strong emotion or deep connection, accompanied by an intense desire to joik (cf. Skaltje 2005).

most famous poems written by Áillohaš, who encoded this auditory process as follows (Valkeapää 2001: 43):

luohti
dat in leat mun
mun in bija dan
in bija dajahusaid
dat fal bohtet²⁸

This nearly osmotic exchange of *luodit* between sounding actors and their surrounding environment opens another more-than-musical dimension of *juoiggus* as something that «from nature comes and to nature returns». ²⁹ When discussing the «more-than-human socialities» that underpin *juoiggus* as a biocultural heritage (Aubinet 2020a: 12), the origin story of *juoiggus* provides a valuable account of this intersubjective deep listening and communication beyond exclusively human realms. According to this story, humans learned to joik by listening to the beautiful voices of chthonic people like *ulddat*, *hálđit* and *gufihttarat*. In his pioneering Sámi endo-ethnography *Muitalus sámii birra* (An Account of the Sami), Johan Turi recounts this primordial sonic encounter, emphasizing on several occasions the extraordinary vocal skills of these more-than-human entities in performing *luodit*:

Ja ulddat leat dakkár olbmot, mat orro eatnama vuolde ja bávtiid siste. Ja dat leat dan sogas, maid vuosttaš váhnemat leat bidjan eatnama vuollái. [...] Muhtun ulddat leat hui čeahpit juoigat. Sámit gullet dan dávjá. Ja sii leat oahppan maiddá ulddain juoigama. Ja ulddat atnet sámii biktasiid, ja dat reainnidiit bohccuid ja gilljot, ja beatnagat cillet, ja biellut skillet, muhto ii oidno ii miige. Ja jos nubbi nubbái dadjá: “gul, mii dat gullo!”, de ii gullo ii miige. [...] Ja ulddat leat velá dálnai seammá go iežá olbmot; sámit oidnet ein dávjá ja gullet dálnai. [...] Bártneat leat oaidnán soames háve ulddanieidda, ja dat lea nu čáppat, ahte son hálidii beassat lagabui. Ja go son beasai lagabui, de son jurddašii: vare dat munne! Ja de dat nieida jávkka, ja de dat bárdni bázi akto, ja sutnje šattai ahkit. Ja son manai nuppi beaivve seammá báikái, ja de son gulai go ulddanieida juoiggadii, ja dat lea su mielas dego livččui seammá nieida. Ja son guldalii guhká dan čáppa juoigama, ii son lean ovdal gullan nu čáppa juoigama. Ja dat bárdni oahpai dan ulddanieiddaš juoigama, ja oahpahii iežá sámii juoigama. Ja gal dat leat iežánai sámit gullan ja oahppan juoigama. (Turi 1910: 86)³⁰

²⁸ “Luohti / it is not I / who creates it / nor the words / they just come” (Valkeapää 2001).

²⁹ Ánde Somby, oral teaching (personal communication), May 19, 2021, Sirbmá, Sápmi.

³⁰ “Ulddat are people who live underground and inside stones. And they are kin to those that the ancestors consigned to live underground. [...] Many ulddat are very skilled in joiking. The Sámi overhear them often. And the Sámi also learned joiking from the ulddat. And the ulddat wear Sámi clothing and they herd their reindeer and shout at them, and their dogs bark, and bells clang, but one sees nothing at all. And if someone remarks to someone else: ‘Listen! What do you suppose that is?’ then they will no longer hear anything at all. [...] And the ulddat live even today much like other people; Sámi still see and hear them often. [...] Boys have at times seen an ulda girl, and she was so beautiful that the boy wanted to get close to her. And when he got closer to her he thought to himself: ‘If only she were mine!’ And at that the girl disappeared, and the boy was left alone, and he was very

It would be inaccurate to regard this origin story as purely mythological, as Sámi life narratives continue to validate Turi's account up until today (Gaup 1995; cf. Aubinet 2020). The *juoigi* Siri Päiviö (Heandaraga Sire), for instance, describes the experience of those who have heard *háldit* joiking as a deep fascination towards their extraordinary vocal abilities, notably presenting a previously unrecorded *dajahus* from one of their *luodit*:

Háldit goit juiget. Gula Ovlá, eaigo dat lean gullan go háldit juige dán váris. In mon dieđe jus lea njuolga. Dat lea gullon ahte juige háldit dalle go dása jođiimet, dán beallái. Daid jagiid. Ná lohke vel dajahallan:

Go Sunná Vulle Nihko Ovlá bohccot nu guhtot, nu lotka guđodit.

Háldit leat nu čeahpit juoigat. Na hirbmat čeahpit. Dulen dat leat albma čeahpit. Mon in leat ieš soaitán gullat ollenge. Láven dakkaviđi guldalit daid mat mitalit.³¹ (in Skaltje 2005: 41-42)

Maj-Lis Skaltje's work is particularly dedicated to this narrative presenting *juoiggus* as a tradition shared and co-developed among Earth beings in Sápmi: *juoiggus lea luonddu olbuid árbi*, the heritage of people and nature as one (ibid: 73). The Land joiks (*juoigá*) and imparts *juoiggus* (*juoiggaha*) through the voice of the wind, of creeks, of reindeer, of birches, of mosquitoes, and so on: «Luondu lea leamaš oahpaheaddji»³² (ibid: 285). It is worth considering whether the circulation of *juoiggus* among other-than-human beings, along with the Sámi people's ability to hear and catch *luodit* in their voices, may have contributed to the preservation of this more-than-musical tradition during the most intense periods of colonial oppression. Eana herself may be understood as a living and polyvocal archive (cf. Cariou 2020; Ancic 2024), where *luodit* continued to be shared and passed on through environmental listening – out of reach from settler surveillance and benefitting of this ontological and acoustemological misjudging. As Skaltje succinctly summarizes: «[b]ahámus váidudanviggamušaid siste luohiti elii julggaheamet guhkkin mehciin»³³ (2005: 73). An exemplary and touching passage in this regard is offered by Sámi poet Rauni Magga Lukkari, who reflects on how, despite the violent assimilation that for centuries stigmatized and silenced

disappointed. And then he returned to that place the next day and he heard an ulda girl joiking, and she seemed like the same girl to him. And he listened to that beautiful joiking for a long time; he had never before heard such lovely joiking. And that boy learned to joik from the ulda girl, and he then taught joiking to the other Sámi. And so other Sámi heard and learned joiking.” (Turi 2011: 113-114).

³¹ “*Háldit* do joik, in any case. Did you hear, Olof, they haven't heard when the underground people were joiking by this mountain. I don't know if it's true. It was said that the underground people joiked when we moved here, to this side. Those years. They joiked with the following words: *When Sunná Vulle Nihko Ovlás reindeer graze, they graze so quietly*. The underground people are so skilled at yoiking. Really skilled. I mean properly skilled! I haven't personally had the chance to hear them. But I always listen whenever someone tells me about it.”

³² “Nature has been the teacher”

³³ “In the midst of the most challenging times of oppression, *luohiti* survived in secrecy among the distant forests.”

juoiggus, the knowledge of this practice has been preserved among the Sámi precisely through the act of listening with the Land:

They kept yoiking – the ones who knew how to. In love, they yoiked the one they wanted. They knew it was not a sin. Earlier, they had not dared: Læstadius and Tuderus had strictly forbidden chanting. But even a Christian could not help yoiking once he got up on the fells. The fell yoiked, and the lake and the creek, the wind howled its troubles and it was impossible to live the way Tuderus and Læstadius had told them. Humbly, he first yoiked the wind, then the fell, and, feeling sad, thought about the powerful clergymen and their lack of judgment. How could they know what it meant to live on the tundra and chant the same yoik as the wind? (Lukkari 1967: 99)³⁴

...as acoustemology

Thus, *juoiggus* emerges as an acoustemological skill that, through both reception and expression, makes sense of sonic reciprocities that may remain unintelligible within the conventional boundaries of music. In both classroom discussions and conference settings, I am frequently asked two key questions when addressing the act of listening to *luodit* in other-than-human voices: How can we interpret environmental sounds from a musicological perspective? Where is the rhythmic and melodic correspondence between *luodit* performed by human and other-than-human *juoigit*? A tentative answer begins with the dismissal of a top-down and “monotheistic” musicology, embracing instead musicologies that are potentially as plural as the diversity of music ontologies. This response would then evidence how a *luohti* cannot be reduced to a more or less organized combination of tones, rhythms and timbres. As Jakop Janssønn ratifies, dealing with *juoiggus* one should «understand and approach [it] in a way that is broader than just the realms of music» (2024: 2). For Janssønn «the nature of yoik becomes even clearer in its absence», meaning that even if a *luohti* «can be accurately transcribed in terms of melodic line, phrasing and rhythms», these qualities alone do not measure its validity as *luohti*, and vice versa, even when these features are absent or unrecognizable one might still hear a «“true yoik”» (2024: 2).³⁵ In other words, in absence of musical structure, *juoiggus* persists as an intersubjective relation, while the morphological diversity of *luodit* simply accounts for the diversity of dialects in a deeper, echosystemic communication (Valkeapää 2001). Drawing from the teachings shared by Jörgen Stenberg in the podcast *Sámi ritmmat / Samiske rytmer*, Jakop Janssønn describes this communication as: «a language with which nature wants to be addressed» (2024: 2):

³⁴ English translation by Kaija Anttonen in Hirvonen 2008: 130.

³⁵ For this reason, I have not included a customary paragraph focused on the morphological aspects of *luohti*, for which I refer to the extensive existing literature, particularly Jones-Bamman (1993), Graff (2004), Fjellheim (2005), Jousté (2009), Renzi (2019), Aubinet (2020a).

And then one might think that [*luohti*] is created by humans, but I believe neither language nor yoik is a form of communication that is exclusively between humans. It is also a communication with nature. For nature and humans to understand each other, one must speak a language which nature wants to be addressed. I have considered how different languages and dialects develop, and different modes of expression such as yoik and the like. It's easy to fall into the trap of thinking that humans are the norm and that this communication is just a human expression between people, but that's not the case. [...] You must speak in a way that the mountain and nature understand you. [...] Based on this, it becomes crucial to preserve the various characteristics and dialects of yoik.³⁶ (Stenberg 2023)

As *juoiggus* captures and manifests the essence of potentially any subjectivity and aspect of life, this practice represents a way-of-knowing specifically rooted in listening and sounding practices (cf. Sombly 1995: 17). As *juoigi* and reindeer herder Ante Aikio explains it, «to joik a person, an animal or a place, as much as listening to their *luohti*» is comparable to «getting to know their essential qualities, which leads to a deeper understanding of the joiked subject. So, in a way, to joik is to know». ³⁷ Emblematic, in this sense, is the example Ante uses to illustrate this epistemic contact – not only because it effectively summarizes the relational process, but also because it is grounded in the tradition while adapting to new, unfamiliar contexts. Following the recent sightings of golden jackals (*Canis aureus*) in the Finnish side of Sápmi (Kojola et al. 2024; cf. Laakkonen 2020; Nuotio 2020), Ante expressed with me his strong interest in joiking this alien species and “climate refugee”, whose first verified record in Fennoscandia dates only back to 2018 as a result of rising temperatures. However, dealing with an *ealli* (animal) foreign to Sápmi ancestral ecosystems, the challenges in joiking the jackal have so far proven insurmountable:

AA: I tried to find its voice on the internet, but I came across many different recordings that didn't really help. The best thing would be if I could actually hear it myself while I'm out with the reindeer. That would certainly help me understand better what kind of animal this jackal is. But it's generally very difficult to catch an animal *luohti* and joik it correctly – even more so if the animal is not from Sápmi. How can I understand what goes through its head? How does it behave, and why does it behave that way? Usually, an outstanding experience with the animal brings up its joik. If the jackal were to kill one of my reindeer, then I would start to understand its behaviors, and the joik could come.

NR: You told me that this golden jackal physically resembles both a wolf and a fox. Would those features help you approach the joik?

AA: It's possible that the *luodit* could resemble each other. If I follow the traditional way, I could certainly find inspiration in *gumpe* [wolf] and *rieban* [fox]. Who knows, maybe the jackal will sound like a mix of the two... Or it could be something entirely different, it's hard to say. But I cannot joik the jackal from the wolf alone. To joik the jackal, I need to

³⁶ Translated by Jakop Janssønn.

³⁷ Ante Aikio, Oral teaching (personal communication), June 2, 2021, Levi.

know the jackal. My relationship with it could be very different from my relationship with the wolf, for example.³⁸

While the performance of traditional *luodit* fosters the transmission of inherited knowledge about people, animals, and places, the act of catching new *luodit* serves as a “naming process” through which the world is incessantly known and the echosystemic network grow informed of biocultural changes:³⁹

If I go to a place I’ve never been before, I might catch *luodit* that I’ve never caught before, different kinds of *luodit*. And this works also with people – you might catch their *luohti* without even knowing them and this way you will know them. Which is very special and I hope this will never vanish.⁴⁰

The account of Ante Aikio, along with this latter reflection from Sara Marielle Gaup Beaska, frames *juoiggus* as an epistemological paradigm through which the Sámi interpret changes by encoding them within a recognizable system of values. Sense-making starts from the joint act of listening and joiking, through which novel relations are forged within the vast, pre-existing echosystem. This has profound implications for the Indigenous sense of belonging, particularly in a time when the expansion of extractive industries is radically transforming and disfiguring ancestral spaces:

Joiking places helps me reconnect with the Land and get to know sites that I hadn’t previously known. However, many places don’t have a *luohti*, so when people catch new *luodit* from these places, it means a lot for us and it means even more for our Land.⁴¹

In response to my question about what he experiences while catching a *luohti*, Mathis Eira adds further tones to this process of knowing through “listening with *juoiggus*”: «Of course I do hear my own voice. But I hear also what I think is the picture of who I’m joiking – if I can put it that way. For example, if I joik a person I see and hear the person, I can feel their energy».⁴² A similar experience occurs with animals and places. Each animal species typically has one *luohti*, which «may not be the same from one community to another» (Aubinet 2020a: 20). Mathis Eira underlines how

³⁸ Ante Aikio, Oral teaching (personal communication), June 2, 2021, Levi.

³⁹ When a child is born, it is common for them to be gifted a *luohti*, often referred to as *dovdna*, which serves as a musical name that marks their entry into the human lineage. As the child grows and matures, particularly reaching adulthood, they may receive another *luohti* that reflects their evolving identity. This *luohti*, in fact, represents a sonic and poetic portrait of a person’s character and essence, offering a glimpse into their personality. This *luohti* never belonged to the one who caught or joiked it, but to the individual *juoiggalmas*, who becomes the rightful owner of the *luohti*. According to Ánte Mikkel Gaup, *luodit* are also be gifted during significant events like confirmations and weddings, serving as a way for the community to acknowledge and celebrate a person’s life goals (Gaup 1995; Skaltje 2025; Aubinet 2020a; Gaup 2024).

⁴⁰ Sara Marielle Gaup Beaska, Oral teaching (staged performance), October 20, 2022, Venezia.

⁴¹ Ibidem.

⁴² Mathis Eira, Oral teaching (personal communication), June 20, 2023, Guovdageaidnu.

[o]ften animals *luodit* sound like how the animal sounds. The mosquito and the wolf are a good example, because their *luodit* are very onomatopoeic. But then you also have reindeer and pets, which are closer to our daily life and for this reason they might get individual *luodit* that are not just imitating but more identifying, just like personal *luodit* do. For example, if there is a person that is really quiet, like not so much energy, the *luohti* would typically be slow-paced. It's like hearing the person's own sound.⁴³

Aubinet similarly describes this way of relating with the *juoiggalmas* in terms of “sonic pictures”, noting that «it aims to describe its ‘object’ with tones. The yolk of a person is therefore supposed to sound like that person. Character traits like self-confidence, timidity, joyfulness, or absentmindedness, for instance, can be rendered into the melodic pattern» (Aubinet 2020a: 17). Although stressing on aurality above visibility, this metaphor has been confirmed to me by Mathis Eira while describing the reactions of his audience at the performance of a landscape *luohti*: «they almost get a picture in their mind. If it's a mountain *luohti*, they can almost see the mountain I am joiking. *Luohti* is a sonic version of a picture. It can be the melodic form of that person, it can be the melodic form of that animal, it can be the melodic form of that landscape».⁴⁴

More than simply being a musical rendition of the *juoiggalmas*, however, this sonic characterization accounts for a knowledgeable understanding of the subjectivity being joiked, which arises from an existent deep reciprocity between the latter and the *juoigi*. More than being just music, *luohti* is a way of knowing:

You know, I've read a lot of research that analyzes joik, from melody to rhythm, breaking it down into its parts. But no one really asks: How does it work? Why does it work that way? Why does the joik of a particular mountain follow one line, while the joik of a river follows another? And why are they so connected and easily recognizable? I think this is where joik becomes more than just music. This is also why I became not just a musician, but a man of sounds.⁴⁵

The synesthetic approach to *juoiggus*, at the intersection of aural and visual logics in engaging with the *juoiggalmas*, was also expressed to me by *juoigi* Wimme Saari. To him, this approach extends into a gestural practice that enables a deeper ‘inspiration’ towards the source of the *luohti*.⁴⁶ The sensory stimulus, he explains, starts from an identification



Figure 4 Wimme Saari's gestural approach to *juoiggus*: the *luohti* traces an imaginary line, followed in the air through hand's movements (Renzi 2019).

⁴³ Mathis Eira, Oral teaching (personal communication), June 20, 2023, Guovdageaidnu

⁴⁴ Mathis Eira, Oral teaching (personal communication), June 20, 2023, Guovdageaidnu

⁴⁵ Johan Sara Jr., Oral teaching (personal communication), March 6, 2023, Máze, Sápmi.

⁴⁶ Note here the use of the word “inspiration” in its etymological sense of “breathing into”, as the gesture of the *luohti* coming to *juoigit* and being animated through their voice.

with «what I’m joiking, like clouds, fishes, or a snowmobile. Through this identification, I perceive lines and shapes that give me impressions of what I’m joiking, and by following these lines, I understand the source of the joik, and its melody comes».47 In the act of explaining this cognitive process, Wimme Saari traced in the air a continuous, undulating line with his hand, following the contours of anything his gaze encountered (Figure 4).

It could be argued that this acoustic gesture, or visualization of the *juoiggalmas*, may be linked to the stylization of the pitch contour of a certain *luohti*. Such outlines, rendered through spectrographic analysis, are widely used in the following pages – adding a morphological layer to expressions translated onto paper from conversations that cannot be merely reduced to speech or musical notation. On the other hand, as previously discussed, *luohti* can be understood as a flow or an entity stemming from the Land, hence the lines described by Wimme Saari might be echoing the sinuous curves of the *duoddarat* – much like the lines that artistically run through the pages of Áillohaš’s volumes and, especially, Aage Gaup’s “Sculpture I & II” (1979). Suspended mid-air, Gaup’s wooden sculpture features a wavy line painted blue at the bottom, yellow in the middle and red on top, symbolizing the colors of the former Sámi flag, which in turn evokes Eana. While being a reference to Sápmi landscape, however, it is notable that Aage Gaup himself described this work as an allusion to the profile of a *luohti* (Figure 5). Discussing the *luodit* of landscapes, Mathis Eira seems to confirm a certain degree of correspondence between the morphology of the landmark and of the melodic profile: «[landscape *luodit*] often follows the contours of the landscape. If you see a rocky mountain, its *luohti* would likely be sharper [sharp hand movement]. On the other hand, when there is a smooth plain or a river flowing very nicely, the *luohti* will probably be smoother or gentler».48

Wimme Saari has discussed how the epistemic reception of the *juoiggalmas* can arise through a process of identification with it, and it has also been noted how *luodit* often suggest a sonic mimesis between the voice of the *juoigi* and the identity of the *juoiggalmas* (see above; cf. Diamond 2019: 255-256). Together, these qualities hint at another layer of the epistemic nature of *juoiggus*, which unfolds from a process of “impersonification”. In the summer of 2023, I attended a *juoiggus* workshop held as part of that year’s edition of the Indigenous music festival Riddu Ridđu, in Olmmáivaggi. The *juoigit* Berit Alette Mienna and Laura Tapiola (Gáva-Áslaga Laura), who were the mentors and knowledge holders facilitating the workshop, emphasized the importance of ‘impersonating’ (from the Latin *in* + *persona*) the *juoiggalmas* prior to joiking it, in order to invite its point of listening and experiences within our world.49 The lyrical content of the spoken word track

47 Wimme Saari, Oral teaching (personal communication), August 16, 2019, Aanaar.

48 Mathis Eira, Oral teaching (personal communication), June 20, 2023, Guovdageaidnu.

49 Laura Tapiola, Oral teaching (workshop), July 14, 2023, Olmmáivaggi; Berit Alette Mienna, Oral teaching (workshop), July 15, 2023, Olmmáivaggi.

“Vuoigŋat”, by Sámi rapper Áilu Valle, poetically condenses this perspectival freedom in *juoiggus*:

Eallit, eallit, eallit, eallin
Válddán ealli hámi
Válden ealli hámi
Eallinhámi
*Eallin hámi*⁵⁰

As Wimme Saari exemplifies it, when joiking animals, «sometimes I become a fish swimming in the river, other times I’m a bird flying in the sky. You know, this is the freedom of joik».⁵¹ Ánde Somby explains this freedom in terms of an onto-epistemological permeability rooted in what he describes as «the shamanistic view» of *juoiggus*, known in North Sámi as *noaidevuohhta*.⁵² Rather than knowing an animal by merely mimicking its voice and behavior, *noaidevuohhta* presupposes a mode of knowing through becoming, where *juoiggus* allows humans to embody the perspective of the other-than-human subjectivity being sought for understanding (Somby 1995; Helander-Renvall 2010: 50; Porsanger 2012: 42; Aubinet 2020a: 117):

In the *noaidevuohhta* we have this idea of transformation that is very important to understand our reciprocity with nature. The idea is that as a human one can transform into an animal and then go back to the human form. This is closely linked to joiking. Being a human means that I’m sort of bound to this body, and therefore I’m not able to physically morph into a wolf, for example. But when I joik the wolf, then it’s the closest I can get to perceive the world and also be perceived by the world as a wolf. In that respect the joik is very practical to convey messages that the human ear cannot ordinarily comprehend.⁵³

According to this understanding, the voice of a *juoigi* transcends mere sonic mimesis and undergoes a proper “phonomorphism”, where the performer *in-personate* the *juoiggalmas*, getting to experience the world from its perspective and being perceived by the world as such. While Ánde draws attention on the physical limits of fully detaching from his own corporeity, his joiking style [*juoiganvuohki*] undoubtedly encompasses a physical dimension intrinsic to the use of his phonatory system that undergoes transformations corresponding to the transition toward an other-than-human subjectivity. Ánde Somby has implemented this

⁵⁰ These lyrics have a highly symbolic value, but an approximate English translation is offered by Áilu Valle as: “To live, animals, we live, Life / I take an animal form / I took an animal form / Lifeform / A form of Life”. The text plays on the etymology of the word *eallin* [life], from which all forms of existence emerge and interchange, without particular ontological distinctions between humans and other Earth beings (Valle 2019).

⁵¹ Wimme Saari, Oral teaching (personal communication), August 16, 2019, Aanaar.

⁵² Ánde Somby, Oral teaching (personal communication), May 19, 2021, Sirbmá, Sápmi. On the spiritual dimension of *juoiggus*, I refer to the existing literature by Eriksson (2002), Bäckman (2004), Wersland, Rognli (2006), Mikkelsen (2017), Kaikkonen (2018), Renzi (2019), Sharma Vassvik (2020), Prost (2022).

⁵³ Ánde Somby, Oral teaching (personal communication), May 19, 2021, Sirbmá, Sápmi.

approach with numerous *eallit* from Sápmi, collating a repertoire baptized “The animals inside the human and the human outside the animals”. In public performances of this repertoire, beside joiking *čuoika* (mosquito), *garjá* (crow), *luossa* (salmon), *gumpe* (wolf), along with other animals, he verbally contextualizes the ecological roles these beings play in our world and conveys messages he is entrusted to deliver while adopting their perspectives. During a *juoiggus* event I curated with the Intercultural Institute for Comparative Music Studies of the Fondazione Giorgio Cini in collaboration with the Sámi Pavilion at the 2022 Venice Biennale, Ánde performed a portion of this repertoire, including his renowned interpretation of the *gumpe luohiti* – the same *luohiti* mentioned earlier in the version of Ingor Ántte Áilu Gaup and widely recognized through the joiking of Per Hætta. Ánde Somby’s *gumpe luohiti* particularly stresses the spiritual qualities of *juoiggus*, unfolding as an extended, bidirectional metamorphosis that evolves across four stages (Audio 1).⁵⁴

The piece opens with long falsetto howls standing out against the silent backdrop of the auditorium. The first seconds – or minutes, varying from performance to performance – serve as a meditative *in*-vocation of the animal, in the etymological sense of summoning it in his voice. At minute 0’50” in the recording, the wolf emerges, abruptly shattering the falsetto and plunging the *juoigi*’s voice into the deepest register with a low guttural, almost visceral, growl. The phonomorphism took place and Ánde’s body temporarily acts as a vessel for the wolf’s voice, as the *luohiti* makes the predator present to the audience ear. This stage echoes the previous verses from Áilu Valle, as the *juoigi* has taken on an animal form [*váldá ealli hámi*]. It was mentioned how the melody follows the profile of the traditional *gumpe luohiti*. Yet, the *juoigi* alters its morphology variably stretching the single cells of the original ABAC structure over a barely intelligible slow pulse. The departure from the original morphology is skillfully achieved also through the exploration of the lower vocal range with a rasped timbre determined by testing the phonatory thresholds and alternating between open and closed vowels (e.g., “ei-la-loi-lon / ei-la-loi-lon, ei-la-loi-lon, ei-io-loi-lan”). Now, it is the wolf who meditates on its new state. With shifting accents and a progressively intensifying pulse, the animal grows ever more confident in Ánde’s voice.

AHRR!

At 1’40”, with a vocal gesture as swift and sudden as the one that had previously cut off the howling, the wolf strikes with a decisive attack, abruptly ending its meditation to acoustically reveal its most dreaded form. This marks the transition to the third stage of the phonomorphic relationship between the *juoigi* and wolf.

⁵⁴ The recording of the referenced Venice performance can be accessed at: <https://www.youtube.com/watch?v=cBzcYKVPnO8>. This recording presents a condensed version of longer performances, most notably the outdoor performance in Kvalnes with Chris Watson (Somby 2016), which can be found at: <https://www.youtube.com/watch?v=9wF9USUYgFg>

The *luohti* is now shouted with a ventricular voice at a higher register; the pulse is also tighter, though still not consistent. The intensified pressure causes the vocal leaps to regularly exceed the intervals of the traditional *gumpe luohti*. Yet, the wolf's sonic identity remains unmistakable at all times and, in fact, becomes increasingly more tangible. In this phase, the vocal anatomy of the *juoigi* is subjected to extreme stress in both directions – plunging into deep growls and soaring into high, strident howls. The wolf acts and reaches out through Ánde's vocal tract. However, there are moments when the wolf's vocalizations surpass the physical capabilities of the *juoigi*. By tersely shifting the intensity and progressively raising the pitch, *gumpe* forces maximum air pressure through Ánde's vocal cords, placing the cricothyroid muscle under extreme tension. This results in increasingly frequent register breaks (3'04"), as the stiffening vocal cords reduce their vibrating length, producing frequencies nearly an octave higher. The increasing number of voice cracks allows the audience to overhear the simultaneous existence of two voices coming from a single body: the mix of chest and guttural voice characteristic of *juoiggus*, and the falsetto of the howls – human within wolf and wolf within human. Through this unique technique, the phonomorphism is pushed to its most extreme consequences in a temporary anatomical transformation of the phonatory system. In the Long Plain featuring this *luohti* (Somby 2016), at 13'07", the voice ascends another couple of hundred hertz, further straining the laryngeal muscles and forcing an increasingly tighter and stressed passage between the two voices – and so, between the two beings in becoming. This moment of profound sonic liminality reaches its climax at 17'06" (3'26" in the Venetian performance), when a final voice crack transitions definitively into *falsetto*, returning the voice to the initial howling and closing the performance by completing the phonomorphic cycle.

To summarize, *juoiggus* has been described as a network of sonic kinships connecting diverse subjectivities and the Land, as well as a way of knowing the world in the performance and in the act of listening. Both qualities are evident in the experience of Mai Britt Utsi, which directs the attention towards another fundamental aspect of *juoiggus* particularly useful for its definition as more-than-music:

When a lake, a mountain or a fjord have their own *luodit*, we are connected with them. In a way, it's as if you know them in your mind, and no matter how far you are from these places... If they come to you, you can joik them, and they will be with you. Have you read what Johan Turi has written about *juoiggus*?⁵⁵

⁵⁵ Mai Britt Utsi, Oral teaching (personal communication), July 3, 2023, Guovdageaidnu.

...as history of listening

In asking for my thoughts on *Muitalus Samiid Birra*, Mai Britt purposely referred to the section of the book where the Sámi author describes *juoiggus* as «okta muitingoansta nuppiid olbmuid. Muhtumat muitet vašis ja muitet ráhkisvuodain, ja muhtumat muitet moraštemiin» (Turi 1910: 91).⁵⁶ She then further remarked that «to joik is to remember, perhaps people who aren't with us anymore. With their *luohti* you can bring them back, and those who loved them will be grateful to hear them again. It can be a way to keep someone alive and show care».⁵⁷ *Luohti* is something that people leave behind as a tangible – although sonic – memory of their life, as *juoigi* Maria Blind (Máreha Lásse Márjá) puts it: «Go leat muitán soames olbmo, mii lea jápmán ja das lea luohti báhcán, de leat juoigan. Dat leat de muitán dainna málliin dan olbmo. Olbmot maid diehtaledje dainna málliin ja muite nuppi olbmo dainna juoigamiin»⁵⁸ (in Skaltje 2005: 262). Mathis Eira shares a matching view, adding that *juoiggus* roots deeper than intellectual memory, which is more common in music. It enables an emotional and nearly physical “presencing”, opening channels of communication with those who are remembered:

Nowadays people know joiking as a form of music. But in the old days, joiking was a communication, not just with people but also with the land and her animals. And it was a way to remember. Personal *luodit* can be a way of remembering people that, for example, have passed. Yet, even if they are gone, their *luohti* lives on, and when you joik it, it will feel as if that person is still with you.⁵⁹

This practice of keeping those who have passed alive through their *luodit* is widely documented in the literature (Jones-Bamman 1993; Gaup 1995; Rydving 2013; Aubinet 2020a; Skaltje 2005). As Mathis Eira suggested, this tradition also extends to places and animals. For example, Lars Henrik Blind mentions the joyful memory of particularly cherished reindeer:

Ja bohccuin leat maid iešguđetlágán dábit. Luondu dat lea bohccos. Muhtin boazu lea árgi ja muhtin lea guovddážis ealus ja muhtin lea diekkár golgolaš. Ja virggit han muhtin bohccuin ain nai leat. Muhtimat leat buorit vuojánat ja dolin go guotthedje, riideje mánát, ledje giehtahearggit, buorit gieđasbohccot. Daid dat gal muite olbmot ja juige maid. Dat dat gal ledje dan árvvus ahte luoddi bidje. Láven gullat go lávejit juoigat daid dološ herggiid ain, dat dološ njárgajohttit. Dat goit ain

⁵⁶ “It is a practice for recalling other people. Some are recalled with hate, and some with love, and some are recalled with sorrow.” (Turi 2011: 117)

⁵⁷ Mai Britt Utsi, Oral teaching (personal communication), July 3, 2023, Guovdageaidnu.

⁵⁸ “When you remember someone who has passed away and that person’s *luohti* remains, you joiked that person. That’s someone’s memory. People have been knowing and remembering each other with *juoiggus*.”

⁵⁹ Mathis Eira, Oral teaching (personal communication), June 20, 2023, Guovdageaidnu.

muittašit daid, luđiiguin ja juoigamiin. Árvidan dat leat buor'hit bálvalan daid isidiid.⁶⁰ (Blind in Skaltje 2005: 256)

While for *juoigi* Lars Tomma (Hommá Lásse), it was the sorrowful loss of a substantial part of his herd that inspired a *luohti* recalling the most flourishing times of his reindeer:

Go lei nu goavvi ja nu ollu manai boazu, dat dat lei juste mielas, go mon juigen goavvedálvvi. Jahki lei 1973 dahje 1972, juobbá goabbá. In lean muđui juoigat, muhto manai bealle eallu. Badjel duháha lei eallu, iige báhcán go vihttačuodi. Dainna mon diktejin dan luodi.⁶¹ (Tomma in Skaltje 2005: 271)

Some may joik people who have passed, while others may joik specific moments from the past. However, *juoiggus* as the “art of remembering” is not limited to recalling those who have died. It can also serve as a comforting practice when one is alone, far from home, or missing loved ones. The *juoigi* Nils Tomas Parfa (Barffá Nils Duommá) considers his godmother as «diekkar sykologa» [a kind of psychologist] because «[d]as lei luohti juohke dinggas. Bohccuin, váriin muhtimin ja go vulge juosat»,⁶² and from her teaching he came to realize the comfort offered by joiking when alone, as *luodit* «bohtet mutuit» [brings forth memories] (Skaltje 2005: 93-94), for example, of the sister:

Márjá Ristiinná juo fertejin muitit
Go mon juo ledjen juoiggadeame
Muhto dat vulggii orjjes balvvaid vuollái
*Ja mon amastuvven*⁶³

Aubinet explains this practice as a way to «summon a set of memories upon which they can dwell as long as the vocalisation lasts» and references a fieldwork conversation in which *juoigi* Mari Helander describes *juoiggus* as a «way of ‘wandering back in time’» (Aubinet 2020a: 19). Mathis Eira supports the idea of *juoiggus* as a comfort-seeking practice, useful for bridging both temporal and spatial gaps: «When I haven’t seen someone for many years, or haven’t been to a place for a long time, or when I’m traveling far from home, I might joik a friend or

⁶⁰ “Each reindeer has its own habit, or nature. Some are shy, others want to be in the middle of the herd, and some prefer wandering. Some reindeer have their specific tasks. Some are good sled reindeer, and in the past, when reindeer were used for carrying, children rode on certain males. There were those males that didn’t shy away and could be really close to humans when leading the herd. They remembered such reindeer and joiked them because they were so valuable that they had their own *luodit*. I often listen when those who used to move to the peninsulas still joik the reindeer from that time. They still remember them through *luodit*. I assume they served their master well.”

⁶¹ “When the season was so harsh and many reindeer gone as a result, that’s when I joiked the harsh winter. The year was either 1973 or 1972. I wouldn’t have joiked it otherwise, but half of the herd was lost. There were over a thousand reindeer in our herd, and only five hundred were left. That’s why I remember it with that *luohti*.”

⁶² “She had a joik for every situation, the reindeer, the mountains, or when someone went somewhere.”

⁶³ “Remember clearly Márjá Ristiinna, / as I joik now / But she left us for the clouds in the south, / and I became a stranger to her” (ibid: 94)

familiar places. In a way, it's a form of relief». ⁶⁴ As Mai Britt Utsi insightfully observes, *juoiggus* is transcendent: «It is transcendent when it comes to time, when it comes to place, and when it comes to generations. Hmm. That's how it is... This art of remembering». ⁶⁵

Although – for understandable reasons within both practice and literature – *luohti* as memory is more frequently associated with the remembrance of people through human performances, it would be limiting and improper to consider this aspect of *juoiggus* as unidirectional within the broader Sápmi echosystem. Just like *juoiggus*, within Sámi ontologies “remembering” is not a quality exclusive to human agency. I once heard an anecdote about a woman from Unjárga who would regularly visit a particular spot in the bay, where the wind seemed especially melodic due to the site's special morphology. In the voice of the wind and the resonances of the bay, she could hear the *luohti* of her late mother. It was as if the landscape itself was joiking to remember those who had lived with and within it. Similar narratives also appear in the work of Maj-Lis Skaltje (2005).

When a certain person, animal, landscape, or event is joiked, the *luohti* brings forth a piece of their life story (Renzi 2021b). In the unity of Land and storytelling (Carious 2020), the reception and expression of *luodit* outlines the history of the deep, longstanding connection between Earth beings and the Land. This echoes the idea, described by Steven Feld in relation to the rainforest, that sound is central to a relational ontology within which

what you learn is that you are part of a listening community, that listening is what makes community. And the community of the living and the non-living, the community of the past and present, is always an acoustic community of memory, together as part of a continuum of listening, a history of listening. And you are part of this. But you are not the dominant part of it, you are just the perspectival center of it because your sounds and the sounds of all others are co-eval, living a relational equivalence. (Feld 2024: 142)

In this sense, *juoiggus* can be interpreted itself as a history of listening. As the Sámi perceive their history as «woven into the landscape» (Aubinet 2020a: 254; cf. Ligi 2016), *juoiggus* has functioned both as an historical source – in the act of listening – and as an oral form of historiography – which through the performance has mapped places, times, kinships, generations, and affects, as well as traced their co-evolution and transformation, particularly in times when written records did not exist. ⁶⁶ Even today, the most skilled *juoigut* carry hundreds, if not thousands, of *luodit* in their memory, continuing to catch new ones as part of the ever-expanding echosystemic network and biocultural heritage of Sápmi (cf. Skaltje 2005: 289).

⁶⁴ Mathis Eira, Oral teaching (personal communication), June 20, 2023, Guovdageaidnu. A similar account can be found in Jernsletten (1978: 110).

⁶⁵ Mai Britt Utsi, Oral teaching (personal communication), July 3, 2023, Guovdageaidnu.

⁶⁶ I refer to the use of co-evolution as defined by Steven Feld, who describes it as «mutually supportive adaptive strategies linking nature and culture» (1984: 389).

Remembering through *luodit* has been essential to pass on knowledge and wisdom across Earth beings and from generation to generation – and as long as someone or something is joiked, even if they have passed away, their memory and knowledge lives on (Jones-Bamman 1993; Skaltje 2005). The historiographical potential and responsibility of *juoiggus* are today embraced by both older and younger generations of Sámi *juoigit*, as 23-year-old Mathis Eira eloquently acknowledges:

Luohti has been a central part of our oral storytelling. Stories are told through sounds, sometimes with few words, sometimes with many, which jointly carry important messages and teachings. And when you hear enough *luodit*, you begin to understand how these stories actually compose the history of our land and our people. So I hope that this memory will not fade away.⁶⁷

This extensive and multifaceted collation of descriptions represents only a fragment of the totality of *juoiggus*. While all the mentioned qualities contribute to understanding the intricate ways *juoiggus* operates in practice, they resist any singular, monolithic theory. The definition and rationalization of *juoiggus* are rarely articulated by its practitioners unless inquired by outsiders, and even then, the rules are hardly canonical – neither uniformly across Sápmi, nor sometimes even when belonging to the same community. This reflects the complexity and flexibility of a practice that is contextually informed and has continuously adapted to different times and spaces since time immemorial:

NR: How do you feel when a joik comes? Do you feel specific emotions, connections, or...

MB: Often yes. But this is not always the case. It's so strange, *luohti*. Joik can be very mischievous. There are no rules. It's unpredictable. That's one thing I realized, and I think very often. But it's also what makes it so fun and... and so... [laughs]. Ahh, the sound of the joik.⁶⁸

However, three overarching fil rouges emerge from the various positions presented.

(1) *Juoiggus*, as a holistic phenomenon, is an echosystem (a wordplay between “echo” and “ecosystem”), defined in these pages as a complex network of sonic reciprocities that develop over time within a defined area, involving all living organisms, the abiotic elements that characterize it, and the ways they influence each other.⁶⁹ This echosystem connects every entity, place and event through privileged sonic relationships – *luodit* – that establish and reinforce inter-subjective kinships. [way-of-being in the world]

(2) *Juoiggus* represents an acoustemological paradigm; a way-of-knowing through listening and sounding practices that encompass the Land and every

⁶⁷ Mathis Eira, Oral teaching (personal communication), June 20, 2023, Guovdageaidnu.

⁶⁸ Mai Britt Utsi, Oral teaching (personal communication), July 3, 2023, Guovdageaidnu.

⁶⁹ Notably, however, it has already been mentioned that the distinction between biotic and abiotic does not hold in Sámi ontologies in the same way as it does within dominant scientific ontologies.

subjectivity. Environmental sounds – as *luodit* beyond the human voice – carry valuable knowledge and messages for those familiar with them and able to interpret them. On the other hand, listening with *juoiggus* becomes a way through which the Sámi continuously interpret the world, encoding every nuance, including change, within a recognizable system of values. [way-of-knowing the world]

(3) *Juoiggus* unfolds as a history of listening in its combined essence of storytelling and sonic memory. Engaging with the past by tracing and encoding ecosystemic genealogies within specific sonic formulas has ensured the preservation of not only the memory of individuals, communities and places, but also of practices and long-standing connections people have had with the land. Each region, along with its human and other-than-human inhabitants, has potentially left historical tracks in the form of *luodit*. This memory, acoustically woven into the landscape, represents a biocultural heritage that older and younger generations of Sámi continue to reassemble and pass on in the performance. Land and *juoigut* embody living archives for the safeguard and transmission of ancestral knowledge, while also providing key insights into how this knowledge and the natural landscape of Sápmi have transformed over time. [way-of-doing the world (through stories)]

With this thesis, I focus on these three qualities of *juoiggus* – as an echosystem, an acoustemology and a history of listening – with the awareness and acknowledgment that *juoiggus* is this and much more. Given its flexible, contextual, and wide-ranging horizon, perhaps the most fitting definition of this heritage is the one offered by Maj-Lis Skaltje:

<i>Luohti lea eanet go musikka</i>	<i>Luohti</i> is more than music
<i>Ludiiguin olbmot diehtalit</i>	With <i>luodit</i> , people communicate
<i>gaskaneaset</i>	between each other
<i>Luohti lea gulahallanvuohki maiddá</i>	And <i>luohti</i> is a form of communication
<i>luonddogáhppalagaiguin</i>	with other organisms as well
	Skaltje 2005: 213

<i>Luohti lea bohcco nuohtta.</i>	<i>Luohti</i> is the reindeer's tune.
<i>Luohti lea ožžon šuoŋaid lottiid, jogaid</i>	<i>Luohti</i> got its notes from the voices of
<i>ja biekkaid jienain.</i>	birds, streams and winds.
<i>Luohti lea oanidan guhkes sevdnjes</i>	<i>Luohti</i> has shortened long, dark
<i>dálvejaid.</i>	winter nights.
<i>Lea leamaš guoibmi viiddis mehciin.</i>	It has been a companion in the vast
<i>Lea addán fámu go miella lea vuollin</i>	forest. It has given strength when the
<i>ja bargu lossat.</i>	mind was down and the work heavy.
[...]	[...]
<i>Luohti lea illu [...].</i>	<i>Luohti</i> is joy [...].
<i>Luohti bisuha olbmo nuorran [...].</i>	<i>Luohti</i> keeps a person young [...].

<i>Luohti lea muitingoansta, aktasaš somá ja vuohki ráhkisvuoda vuosehit.</i> <i>Luohti olle guhkibui go sánit, lagada ja laktá sogaid, olbmážiid ja olmmoš- buolvvaid. Daid nai mat leat juo iežá máilmmis.</i>	<i>Luohti</i> is the art of remembering, a joint fun and a way to express love. <i>Luohti</i> reaches where words cannot, bringing together families, connecting people and generations. Reaching even those who are already in the other world.

Ibid: 12

A *luohti* is a melody. But then, again, it is also something more.

...as more-than-music

The description of *juoiggus* as something “more than music” (*eanet go musihkka*) first appears in the foundational work of Maj-Lis Skaltje, *Luondu juoiggaha* [Nature makes you joik] (2005). It serves as a concise expression that captures the depth and flexibility of this tradition, based on the irreducibility of an extensive and assorted collection of oral accounts gathered over 20 years throughout Sápmi by the Sámi author. Although it did not originate as a theoretical paradigm, in this thesis, “more-than-music” is scholastically embraced as an Indigenous theory grounded in Sámi onto-epistemologies and practices. It unfolds as contextual to Sámi *juoiggus* and Sápmi echosystems, yet its very essence – altogether with the teachings it carries – create opportunities to theorize listening and sounding traditions differently, addressing issues that the literature has yet to fully acknowledge by turning the ear to marginal and historically silenced wisdoms. In this sense, it may be more appropriate to speak of it as a counter-theory. *Eanet go musihkka* describes a bottom-up concept that, from Sápmi, challenges a scholarly exhaustion determined by early and contemporary ethnographic accounts that have essentialized *juoiggus* as solely a musical phenomenon. To the enculturated ways of listening that shaped the academic fields researching this tradition, *juoiggus* sounds like music and it exhibits all the qualities of a singing tradition.

The Western scientific tradition’s thirst for universals has led to the assumption that all cultures must have a certain group of phenomena that – at least to a Euro-American ear – sound like music and are to be «merely so labelled because, rightly or wrongly, they seem [...] to resemble the phenomena which I am in the habit of calling music in my home ground» (Wachsmann 1971: 384; cf. Nettl 2001). However, as illustrated in the previous section, music is only one dimension of *juoiggus*, whose wholeness cannot be reduced to musicality alone. In fact, it could be argued that *juoiggus* became “music” only a couple of centuries ago, when the first transcriptions in Western staff notation carried out by non-Sámi musicologists (Acerbi 1802b; Launis 1908; Tirén 1942) translated the ontology of *luohti* from ecosystemic reciprocity to musical object. Necessarily, research dealing with more-than-music phenomenon compels a theoretical premise that steps down from

ethno-anthropocentric assumptions and takes on a transdisciplinary, biocultural horizon centered in Indigenous knowledge.

In ethnomusicological theory, Merriam reminded us how «[e]ach culture decides what it will and will not call music; and sound patterns, as well as behavior, which fall outside these norms are either unacceptable or are simply defined as something other than music» (Merriam 1964: 27). Bruno Nettl adds that not all peoples «have a term that translates as ‘music’», and therefore «if we are to talk about music as a universal phenomenon, we cannot do it on the basis of a commonality of cultural conceptions» (Nettl 2001: 466). To address this “old anthropological challenge”, two historical paths have been historically advocated. Stoichita and Brabec de Mori identify the dilemma as a choice between «not let[ting] the informant decide on what they consider music» – thereby seeking a definition that overarches linguistic plurality – or following local terminologies of sound expressions (Stoichita, Brabec de Mori 2017: 15).

This dilemma is faced, for example, by Laura Cervantes Gamboa in relation to the study of ritual speech events among the Bribri of south-eastern Costa Rica – a tradition that

is always chanted. Although Bribri ritual language sounds like music, [...] it is not music from the Bribri point of view; instead, it is said to be the way of speaking used in the universe before Sibö created the Bribri world and which is still spoken by the spirit beings who inhabit the other worlds. [...] I will still need to use the word music in relation to musical aspects of Bribri ritual language because it is necessary as part of the vocabulary of an outsider analysis for a foreign audience, however, it will be stressed throughout the dissertation that Bribri ritual language is not music according to Bribri orthodoxy. (Gamboa 2003: 7)

Top-down categorizations imposing “layman’s terms” like ‘music’ can certainly help bridge distant ontologies within the realm of a disciplinary scholarly inquiry. However, Nattiez cautions against etic labeling

chiefly because it is related, in the Occidental realm of knowledge, to the existence of a field of research called ‘musicology’, which considers sound phenomena as musical, independently of the place and conceptualisation which the autochthonous people give them in their own culture. (Nattiez 1977: 95)

Thus, the top-down labeling of “music” encompasses not only the mentioned etic predisposition but also raises ethical concerns. Ascribing a certain practice to the ‘music’ universal risks objectification and extraction from its native ontology. In practice, this leads to a forced detachment from its environment and an alienation from the original logics behind its expression and understanding. As Gamboa hints in her work, if such lexical choice remains unquestioned, it affects the plurality of local classifications for diverse sonic practices and experiences, their associated bodies of knowledge and, more broadly, the whole echosystem within which the

tradition is embedded. During my first fieldwork with Sámi *juoigit* in 2019, it happened more than once than I was “scolded” for misusing terms like ‘singing’ and ‘music’ in relation to *árbevirolaš luohiti* [traditional *luohiti*]. In fact, it is seldom that the Sámi themselves use the term “music” as a synonym or substitute for *juoiggus*. The ontological gap between these two concepts is widely recognized, to the extent that at Sámi festivals and markets, there are separate programs for the performance of *árbevirolaš luodit* and modern joiks or popular songs, and the same distinction is reflected in Sámi radio programming.

This holds even more true in frameworks where the heritage co-evolves and is shared across species,

where not only do we not know what other species may call their own music, but we do not even know if they call it anything at all. On the other hand, however, one should not be so sure that such a problem must be solved at all costs in order to determine the existence of an idea of music in other animals. In other words, we are not sure that a conception of music, if it ever exists, is separable from the actual, material act of doing music. It may be useful to know how the aesthetic use of sounds is defined among the diverse species, but possibly that is not even necessary. (Martinelli 2010: 85)

Novel pathways advocated at the intersection of ethnographic and ecological research have promoted “sound” as overarching paradigm for a comprehensive exploration of the roles that sounding relationships play across different societies and environments. For the Kaluli of the tropical rainforest of the Great Papuan Plateau «there is no “music”, only sounds, arranged in categories shared to greater or lesser degrees by natural, animal, and human agents. Knowledge of these categories is widespread, tacit background for everyday life in the forest» (Feld 1984: 389). Feld is the first to fully acknowledge the inapplicability of the music universal, and although he pioneers an anthropology of sound above an anthropology of music, he carefully stresses the necessities to take on from following local terminologies, that while can be framed in broader domains, «do not oversimplify the culturally specific dimensions of every sociomusical reality» (ibid: 386). Therefore, an even broader inquiry on ‘sounds’, in the transition towards a “more inclusive”, universal has only protracted the risk of oversimplifying complexities while disregarding the agencies of both human and other-than-human beings.

This dissertation does not aim to redefine the macro-categories of “music” and “sound,” nor does it seek to replace them all in all with more encompassing alternatives. Instead, it critically examines the pertinence and relevance of terms like “music” and “sound” contextually to research with Sámi acoustemologies, with the objective of fostering the bottom-up emergence of a paradigm and counter-theory – more-than-music – that derives from and is informed by Indigenous sound ontologies and acoustemologies. As Ulturgasheva and Bodenhorn aptly note, linear

cause-and-effect epistemological connections that guide theories and methods within dominant modes of scientific production in a plural and ever-changing world «do not suffice anymore, new ways of conceptualizing the connection are required» (2022: 33). This is critical when research engages with Indigenous epistemes and diverse expressions of environmental sustainability – which, in the case of Sámi more-than-music, manifest in a heritage equally shared between people and the Land. Such an approach calls not only for new conceptual models for acknowledging and describing biocultural heritages but also methodological frameworks capable of stepping down from deaf preconceptions and truly listening with Indigenous and other-than-human voices.

Listen with, care

*Part of finding is getting lost,
and when you are lost
you start to open up and listen.*
(Tafoya 1995: 12)

*We listen,
we hear so as to know what is being said.
This is good practice.*
(Finbog 2022a: 28)

While this dissertation draws upon mixed methods situated at the convergence of ethnography and ecology (Feld, Basso 1996; Ingold 1998, 2016; Kassam 2009; Bastian et al. 2017; Puig de la Bellacasa 2017; Brigati, Gamberi 2019), the methodological choices have been tailored to align with decolonizing research practices that are both appropriate and essential for a thesis developed in collaboration with Indigenous peoples and centered on Indigenous onto-epistemologies.⁷⁰ Since the seminal work of Maōri professor Linda Tuhiwai Smith (1999), numerous scholars have critically underscored the multifaceted ways academic institutions have been reproducing research approaches and systems of

⁷⁰ The visiting period at the University of Helsinki, which eventually developed into a joint degree under a formal cotutelle agreement, offered invaluable training in Indigenous methodologies and ethics within Indigenous frameworks. Helsinki's program is particularly rich and innovative in areas relevant to my research – i.e., biocultural heritages, Indigenous onto-epistemologies, as well as participatory research methods. In Helsinki, my methodological framework was significantly enriched and attuned to indigenizing approaches fostered across Nordic universities (Virtanen et al. 2021). In my training, this specifically emerged from engaging with reading circles, seminars and courses within Helsinki's Indigenous Studies research group, which has a historic foundation in Sámi studies. Within these lively exchanges, invaluable has been the close supervision of my current advisors from the University of Helsinki, Pirjo Kristiina Virtanen and Hanna Ellen Guttorm.

thought that reinforce colonial narratives of objectification and knowledge appropriation, incongruously alongside the systematic dismissal of local epistemes and plural perceptions of reality in the name of objectivity (Bagele 2012: 78; cf, Kuokkanen 2007; Kovach 2009; Simpson 2014; Coulthard 2014). The call for the decolonization of dominant⁷¹ research paradigms emerged as a means of resisting universalized ways-of-knowing – or monopolization of the epistemic truth – and grew as an imperative to hear and integrate knowledge systems historically unprivileged, silenced or misrepresented within the leading academic exercise (Bagele 2012: 38; cf. Kovach 2009; Held 2019; Robinson 2020). Contingently, the original and ever-growing presence of Indigenous scholars in the discourse on the decolonization of academic research has catalyzed the development of creative and transformative sets of methodological theories, informed by contextual values and practices for the sharing of knowledge, leading to a process often referred to as the “indigenization” of academia (Battiste 2000, 2013; Mihesuah & Wilson 2004; Kuokkanen 2007; United Nations 2007; Wilson 2013; Virtanen et al. 2021). These approaches, however, have frequently been «dismissed as unscientific, self-serving» or aestheticizing as they often take a radical stance in challenging «the beliefs that guide our actions as researchers» embedded in dominant frameworks (Wilson 2008: 13; cf. Kuokkanen 2000).

It is not my aim to elaborate on the dominant paradigms that dictate modes of knowing equally within the natural sciences and the humanities – for which I refer to the extensive critical literature already existing on this subject (Bagele 2012; Wilson 2013). What I do wish to emphasize is the leading role that Sámi researchers and institutions have played in confronting the historical and ongoing asymmetries in research involving Sámi subjects, asserting the importance of emancipation and co-production of knowledge, as well as the indigenization of the sharing process within academia (Porsanger, Seurujärvi-Kari 2021: 34-35; cf. Kuokkanen 2000, 2007; Porsanger 2004; Hirvonen 2008; Guttorm 2011; Virtanen et al. 2021). This is especially strident and relevant to this dissertation given that my fieldwork begun in Guovdageaidnu, a central locus of this debate, where proximity to and dialogue with a self-determined Indigenous research environment compelled reflections on privilege, intentions, epistemic humility and representation in my research approach. In sharp contrast to the protocols of positivistic and post-positivistic research traditions, the often-radical nature of Indigenous epistemes calls for a receptive attitude that humbly honors the plurality and contextuality of truths.

⁷¹ The adjective “dominant” (sometimes in this thesis, “hegemonic”) here indicates a «culture of European descended and Eurocentric, Christian, heterosexist, male-dominated» tradition of thought that historically set norms excluding and marginalizing «those who fall “outside”» this powerful societal position (Wilson 2008: 35). The binomial “dominant/silenced” is, therefore, preferred as versatile substitute to the contested “Western/non-Western”, whose meaning has shifted over time and often lumps together diverse cultures, societies and historical experiences under broad categories that oversimplify a variety of economic models, political structures or cultural trends. For a critical overview of the use of the term Western in Indigenous studies, see Virtanen et al. (2021: 11)

Paying attention to instances of intellectual and epistemic discomfort – when established scientific assumptions and underlying worldviews are challenged – is essential for a sustainable approach to knowledge production that seeks to «avoid inflicting epistemic harm through epistemic ignorance» (Guttorm et al. 2021: 121).

Listening has emerged as a «good practice» in the methodological individuation of receptive postures for research with Indigenous knowledge (Finbog 2022). In qualitative research, the increasing interest for methodologies centered on listening is often described as a response to the vacillating supremacy of observation and visibility in the cognition and representation of reality (Ingold 2002, 2011; Haraway 2013). This «retinic paradigm», as Barbanti describes it (2015), is historically entrenched in a dominant episteme critically addressed already by Augustine, who meditates on the *concupiscentia oculorum* as a generalized desire of knowing and appropriating the reality primarily through this unidirectional cognitive process (Aug, conf, X: 35. 54). In addition to its practical centrality in the study of oral cultures that rely on this cognition as a way of learning and transmitting knowledge (Feld 1984; Brearley, Hamm 2013; Ferlaino 2024), listening as a methodological action in Indigenous research takes on a critical posture of

emancipation from hearing only the voices of Western Europe,
emancipation from generations of silence, and emancipation from seeing
the world in one color (Guba, Lincoln 2005: 212).

Listening has been framed as a relational act not merely because of its ordinary immersivity of hearing, which expands cognition to an omnidirectional scope, but rather as a disposition of both intellectual and emotional mutuality between sensing subjects (Barbanti 2015; Chana 2019). Within the Feldian definition of acoustemology, «sound itself is the center of a relational ontology» that links human and non-human socialities (Feld in Biancorosso, Sala 2023: 129). Because this condition aligns more closely with Indigenous onto-epistemologies that similarly tend to «live within a relational web» (Kovach 2009: 57), listening has emerged in Indigenous scholarship as a recurrent protocol whose methodological observance can ensure a more sustainable production of knowledge while accounting for a shared responsibility in research engaging with historically marginalized or silenced epistemes (Kanngieser et al. 2024; cf. Wilson 2008; Gaski 2019; Robinson 2020). Listening to historically silenced voices can for example lead to a greater understanding of their demands and therefore increased inclusion into academic and political ecologies, or spaces where Indigenous Voices can make the difference.

However, listening alone does not suffice, and I concur with Kanngieser's meditation when she provocatively questions whether the methodological convergence on listening can genuinely enact a reparative process as long as cognition remains anchored to «Eurocentric ways of listening [that] perpetuates the same violences that we are trying to move beyond» (Kanngieser 2023: 690). The

act of *listening-to* Indigenous perspectives, for example, allows the researcher to draw from the immediate voices of stakeholders. Yet, this relationality is limited to a one-way direction in the knowledge transmission that reinforces colonial dynamics of extraction, apprehension and documentation (Robinson 2020; Wright 2022; Kanngieser 2023). A *concupiscentia auricularum*, to play with Augustine's Latinism. Furthermore, *listening-to* a particular source does not necessarily entail stepping down from a dominant point-of-listening; it remains -centric in the way it implies a hierarchy where the researcher-listener is positioned as the one who validates the knowledge of the other.

A methodology of *listening-with* and *listening-for*, on the other hand, emerged as protocol in this research project from the consultation of its principal collaborators (see section 'Muitalusat guldaleami birra'). While the postposition itself denotes a collaborative approach, *listening-with* is about fostering critical alliance and cultivating an ethic of care within the very reciprocity of the cognitive process (Wright 2022: 5, 155). This approach emphasizes the relationships that we, as researchers, inevitably weave – whether consciously or not – with all aspects of the world around us, including environments, communities and knowledge systems. Contextually to framework where this dissertation situates, this attention reflects «[t]he traditional Sámi approach [to] listen for messages from Nature, from our fellow creatures, the animals, birds, wind, sky and the Earth» (Gaski 2019: 262). In this sense, a posture of *listening-with* mirrors an exercise of 'relational accountability', where research is not merely about acquiring and validating knowledge but about doing so in a way that honors and respects all subjectivities involved – human and beyond (cf. Wilson 2001; Gaski 2019):

Rooted in mutuality and consent, this approach is attentive to avoiding the extraction of knowledge, which is instead voluntarily shared and welcomed within a reciprocal attentiveness. In a way, in this framework, knowledge is situated within the relationship itself, as a posture of *listening-with* honors gatekeepers and the philosophy of taking only what is given, in its own time. Finally, *listening-with* speaks of a dialogical encounter of epistemes: cognition is informed by and proceeds with counter-hegemonic paradigms, to which a non-Indigenous researcher bears the responsibility of being open, ready to "know differently".

Within the decolonizing agenda of research methodologies, the unmediated citation of Indigenous perspectives in research outcomes risks reinforcing objectifying stances. Instead, inviting Indigenous ontologies at the center – and even stepping down from the privileged hierarchy of knowledge maintained by academia – encourages a space for collaborative storying, where knowledge is validated with respect and relevancy to the episteme that produces it (Wilson 2001; Guttorm et al. 2021). Thus, in this thesis, the co-design and cultivation of a

transformative methodology grounded in the “Four R’s” action steps⁷² became a responsibility, a consciousness and moral imperative that I embrace as a settler ally to make space for Indigenous epistemes within the “Western” academic institution in which this thesis is situated (Kirkness, Barnhardt 1991; Barlo et al. 2020; Snow 2018).

The very genesis of this dissertation revolves around reciprocal stimuli – specifically, two interactions with Sámi *juoigut* from Máze and Sirbmá during my second extended stay in Sápmi in 2021. This fieldwork was part of my MA thesis in Ethnomusicology, which explored the use of field recordings and spatialization in Sámi music production as tools for transmitting ecological knowledge and engaging in environmental activism through sound art. Johan Sara Jr., Indigenous mentor for this dissertation, invited me to reflect on how many voices come into play when researching *juoiggus*. While Sámi voices are increasingly consulted, though not always fully valued, the voices of animals, winds, mountains and other Earth beings are «never taken seriously and interviewed. Next time you come, you should try asking the river, for example. There is still so much to learn».⁷³

On another occasion, Ánde Somby pointed *juoiggus* to me as a practice of gratitude – a gift received from the Earth, which is returned to the Earth through performance. This perspective suggested the possibility of opening research to a practice of restitution of voices and sounds [*jienat*] to the Land.⁷⁴ Both conversations played a key role in shaping the objectives of this research project, which seeks to co-produce novel knowledge based on interests elicited through mutualistic engagement. Despite acknowledging this co-authoriality, academic doctoral scholarship often simplifies the identification of a single “project leader”, or author. While this aspect remains largely unchallenged, my responsibility as curator of this dissertation led me to develop and apply a research practice efficient in bridging academic writing with the ways of storying of key collaborators, honoring their knowledge sovereignty and validating my analysis through mutually beneficial exchanges of perspectives and experiences.

In the following paragraph, I delve further into the methodological foundations of this dissertation, introducing a multimedia project that complements the written work and – beyond that – honors the relationships developed during fieldwork and ensures the respectful restitution of stories, voices and relevant knowledge to the biocultural community that produced and shared it.

⁷² These are Respect, Relevance, Reciprocity and Responsibility. For the analysis and definition of these steps, I refer to Wilson (2008: 77) and Barlo et al. (2020: 93-94).

⁷³ Johan Sara Jr., Oral teaching (personal communication), April 29, 2021, Máze.

⁷⁴ Ánde Somby, Oral teaching (personal communication), May 19, 2021, Sirbmá, Sápmi.

Muitalusat guldaleami birra⁷⁵

Muitalusat guldaleami birra – Histories of listening from Sápmi lea dáiddalaš dutkanprošeakta mii ovttaštahtá iešguđetlágan guldalanvásáhusaid Sámis. Das lea audioantologijja mii muitaluvo Sámi juigiid, dáiddáriid ja dutkiid jiena bokte, ovtta eará luonddogáhppalaiguin Eurohpá davimus báikkiin hupmet. Dan sisdoallu ja hámadat lei oktavuodas ovttašráđiid oassálastiiguin, dan botta go muitaleapmi muitaleapmi, juoigan ja jietnagovat leat välljejuvvon favorihtamedian. Audioantologijja guorahallá sonihkalaččat oktavuodaid gaskkal sápmelaččaid ja eatnamiid, ja dasa lassin suokkarda koloniála ekstrakšuvdna ja dálkkádatrievdama garra váikkuhusaid rašes bio-kultuvrralaš jietnagovain Sámis. (Renzi 2024: 1)



Figure 6 Front cover of the audio-anthology.

Muitalusat guldaleami birra is an artistic research project that weaves together a plurality of listening experiences from Sápmi. It consists in an audio-anthology narrated through voices of Sámi *juoigit*, artists and researchers, along with other Earth beings co-inhabiting the northernmost fringes of continental Europe. As a multimedia output for this dissertation, this work equally places attention on the

⁷⁵ “Stories about listening”

act of *listening-with* Indigenous epistemes and *listening-with* Earth, opening to the ecosystemic reciprocities between individuals, communities, and the land. As a result, it also confronts the profound impacts of colonial extractivism and climate change on the delicate biocultural soundscapes of the Arctic.

The format of a digital audio-anthology here comprises a curated collection of oral narratives and field recordings edited into a single compilation, where the active interplay of Indigenous storytelling and soundscape compositions provides a mutual commentary. Format, structure and contents of the audio-anthology were co-designed in dialogue with its key collaborators and participants. The choice of placing *muitalusat* [stories] and *muittut* [memories] as a starting point for the sharing of sonic knowledge, for example, emerged from fieldwork consultations, where traditional forms of storytelling were found to be more successful than interviews and conversations in verbally articulating sonic knowledge. While these stories may not conform to formal historiography or compose “official” history – as rather hinted at in the English title of the project – they illustrate and bridge the past, present and future by bringing contemporary events in conversation with intimate memories and community oral histories (cf. Whiteduck 2013; Ulturgasheva, Bodenhorn 2022). Comparably, the creation and use of soundscape compositions was also a collective solution. Soundscape compositions were jointly identified as a potent medium to (1) return the environmental sounds collected in the field, (2) include other-than-human voices and stories into the conversation, and (3) embrace a creative approach to sounds and ecosystems with which Sámi cultures are profoundly connected (see below). The dialogic efforts at the core of this work were intended not only as practical steps in the decolonizing agenda for collaboration, self-representation, self-determination and empowering of Indigenous knowledge – in order, then, to de-center my non-Indigenous authoriality as curator and field recordist (Muotka 2020; cfr. Bratland, Kramvig, Verran 2018; Olsen 2018; Wright 2022) – but also, as ways to avoid the reproduction of dominant knowledge systems and narrative or aesthetic paradigms that are alien to Sámi understanding of the world, most notably nature-culture divides (Helander-Renvall 2016; Joks *et al.* 2020; cf. Kanngieser 2023).

Concomitantly with this dissertation’s defense, *Muitalusat guldaleami birra* is published on Bandcamp, a free streaming platform that not only allows uploads to preserve lossless audio formats and displays transcriptions and translations on screen, but also enables listeners to make potential donations. Despite being a non-profit multimedia project, it has received approval from the Sámiráđđi (Sámi Council) for any possible income generated to be entirely devolved to their institution. These solutions altogether contributed to make space for community-based developments and sharing ownership and relevancy of the research.

Muitaleaddji [storyteller]	Muitalus [story] Jietna [sound]	Giella [language]
	<i>Dollagáttis</i> [by the fire]	
Johan Sara Jr.	<i>Man dihte dat šaddai nu ahte mun šadden diekkar jietnaolmmoš // How I became such a man of sounds</i>	Davvisámegiella
	<i>Biegga</i> [wind]	
Mai Britt Utsi	<i>Jus eai boađe mihcamárat, de goit bohtet dalle guovtti soabbai // If they don't come by midsummer, they'll come with two sticks</i>	Davvisámegiella, English
	<i>Čuoika</i> [mosquito]	
Roman Iakovlev	<i>мӯ югке Саӓмь кӓлэсьт лӓ ӓджесь ӓнн // Each Sámi language has its own sound</i>	Gieldda-sámegiella
	<i>Čahci</i> [water]	
Kristine Eira	<i>Da ii gávdno duodji mas ii lea jietna // You won't find duodji where there's no sound</i>	Davvisámegiella
	<i>Boazu</i> [reindeer]	
Mathis Eira	<i>Olmmoš haliidá gávdnot oadjebasvuohta juohke dinga mas gullá // People want to find safety in what they hear</i>	Davvisámegiella
	<i>Mearrasápmi</i> [coast]	
Ellen-Johanne Kvalsvik	Soundscapes are very personal. They are part of caring and connecting to everything	English
	<i>Áhkku sieidi</i> [Around the Áhkku sacred site]	
Ingor Ántte Áilo Gaup	<i>Go buot ii sáhte sátniguin dadjât de heive juoiggadit // When not everything can be explained through words it suits better to joik</i>	Davvisámegiella
	<i>Mohtorgielká</i> [snowmobile]	
Ida Emilie Lindseth Marakatt	<i>ATV:s ja risku lea guokte iešgudet jietnaid mais gullo sápmi // ATVs and risku are two different sounds that for me belong to Sápmi</i>	Davvisámegiella
	<i>Lottit</i> [birds]	
Áilu Valle	<i>Dat lea hui dehálaš ahte don válddát áiggi guldalit // It is very important that you take the time to listen</i>	Davvisámegiella
	<i>Ekstrakšuvdna</i> [extraction]	
Inger-Mari Aikio	<i>Ráfi jienat ja jaskatvuohta báhcet millii dakkár bottut // Peaceful sounds and silence give the mind some rest</i>	Davvisámegiella
	<i>Jaskatvuohta ja silence</i>	

Table 1 Setlist of stories and soundscape compositions in the audio-anthology *Muitalusat guldaleami birra* (Appendix II).

Central premise for this anthology is the recognition – rooted in Sámi ontologies – that the Land is a living entity, home to a multitude of subjectivities, each endowed with its own voice (Valkeapää 2001; Helander-Renvall 2016; Østmo, Law 2018; Guttorm et al. 2021). In this light, embracing and turning to Sámi ontologies, epistemologies and axiologies in *Muitalusat guldaleami birra* serves not only as imperative to foster ways of understanding, knowing and relating to the world that have been historically silenced by hegemonic systems of knowledge, but also to acknowledge other-than-human subjectivities and value their voices, particularly at a time when existing scientific frameworks have fallen short in confronting environmental crises (cf. Puig de la Bellacasa 2017; Krenak 2019; Taddei *et al.* 2022). As a result, not just humans, but winds, mosquitoes, snowmobiles carry stories that we can learn if we carefully listen with epistemes of biocultural significance. Sámi ontologies attribute an animacy to the Land that dissolves conventional distinctions between what is biotic and what is abiotic (biological animacy).⁷⁷ Every Earth being is a sentient being with own subjectivity and, consequently, an own voice (Skaltje 2005; Helander-Renvall 2010, 2016). Davvisámegiella [the North Sámi language] mirrors this ontology providing an effective «grammar of animacy», to borrow and adapt the concept coined by Potawatomi scholar Robin Wall Kimmerer (Kimmerer 2013; cf. Bayanati, Toivonen 2019).

In his own contribution to the audio-anthology, Kildin Sámi artist Roman Iakovlev elegantly captures such idiosyncratic property of the Indigenous language (Appendix II.3):



<i>Я тэдта лй чофта тыффкма мыннэ, мй Сәммь кйләнэ англискэ сәһь “voice” я “sound” лөв сямма. Таввял-сәммь кйллэсьт сыйй куһтэ лөв “jietna”, ныдтәшэ Кйллт Сәммь кйлэсьт тоһн цялкак “йһн”. Тәһнгуэйкэ, куэссь тоһн кулак пйһһк йһэтә лйһһпэ лоанһһт</i>	And it is very interesting for me that in the Sámi languages the English words “voice” and “sound” are the same. In North Sámi language they both are translated as “jietna”, while in Kildin Sámi language you say “jinn”. For this reason, when you hear the sound of the wind or the sound of birds,

⁷⁶ “Languages”

⁷⁷ For this reason, the renowned taxonomic distinction of sound sources in a soundscape – ‘geophonies’ as sounds of abiotic natural origin, ‘biophonies’ as sounds of biotic natural origin and ‘anthropophonies’ as sounds produced by human activities (Krause 1987; cf. Farina 2013) – does not hold without fracturing the mentioned ontology, which does not distinguish between nature and culture, as well as it blurs the boundaries between biotic and abiotic.

ӱнэть, сыйй ёв лышиэ “sounds”, ноа сыйй лёв “voices”. Пукэсьт лӱ ӱнн Сӱммь ёммьнесьт. Пужк маӱт сӱррнэ.	they are not just “sounds”, but they are “voices”. Everything in Sápmi has a voice. Everything can speak. ⁷⁸

While this example is not exclusive to Sámi languages, the lack of lexical distinction between concepts like ‘sound’ and ‘voice’ blurs across both biotic and abiotic components of an ecosystem, exemplifying such animacy of the Land. The interaction between biological and grammatical animacy – around which Sámi worlds are construed – can also be attributed to the verb- or action-oriented nature of Sámi languages (Sammallahti 1998: 107; cf. Joks et al. 2020; Bayanati, Toivonen 2019), where «patterns of words [...] enact contextual, processual, and radically relational versions of space, time, interaction, subjectivities, objectivities, and the beings that live in the world» (Joks et al. 2020: 306). This linguistic characterization particularly emerges in subject-verb agreements with abiotic subjects (Bayanati, Toivonen 2019), as Joks et al. note:

‘What is the wind doing in English if it is not blowing? Is it sitting in a tree?’ [...]. Though this is self-evident and sounds strange, in Sámi it is grammatically possible to say ‘*biegga bieggá*’, which might be rendered as ‘wind [noun] is winding [the gerund of a verb]’. (ibid: 310)

This deverbal emphasis on actions over nouns facilitates the contemplation of agency and morality across Earth beings, in that, just like humans, «lake and stones embed values, intentions, desires, and notions about what is proper and what is not, and they act accordingly» (Østmo, Law 2018: 354).

Language is a crucial indicator of how peoples conceptualize and interface with the world and «a necessary tool for relaying our knowledge, *árbediehtu*» (Sametinget 2021: 4). With this in mind, participants in the audio-anthology were encouraged to use the language in which they felt most comfortable to tell their stories and verbalize sonic experiences.⁷⁹ Language carries specific skills and encodes knowledge systems within a shared vocabulary, allowing storytelling to hold foremost significance primarily within its native biocultural context (Feld 1981: 22-23; Seurujärvi-Kari 2012; Guttorm et al. 2021: 120; cf. Sametinget 2021). Every lexical choice has the potential to reflect meaningful encounters between beings, generations, and places – encounters that cannot be fully translated without risking alienation from their original knowledge systems. The preservation of these

⁷⁸ Iakovlev 2024.

⁷⁹ Eight of the ten stories feature Davvisámegiella, one is in Gielddasámegiella, and one is in English. The presence of a story in English contemplates the socio-historical implications of language loss due to colonization and assimilation in Sápmi. However, the fact that the storyteller who relied on this language is a researcher whose work is deeply entangled within academic English production also reveals how the specialization of knowledge across different languages can transcend one’s native tongue.

languages, along with the non-textual format of the audio-anthology that contrasts with the formal textuality of this dissertation, is essential for ensuring accessibility within local communities and extending its reach beyond strictly academic spaces.

However, precisely this broader reach, combined with the protocols of academic production, required an extensive translation effort to make the material intelligible to the public, accessible to the academic community, and equally important, available to Sámi individuals not proficient in the Sámi languages featured in the audio-anthology. Aware of the risks of mistranslation and abstraction highlighted by Østmo and Law (2018), Joks et al. (2020), and Guttorm et al. (2021), I made every effort to corroborate and refine the English translations, not only with my translator collaborators but, most importantly, with the storytellers themselves. This dialogue aimed to find vocabularies that closely captured the wisdom encoded in specific Sámi *sánit* [words].

Despite these efforts, both in the translation of the audio-anthology's liner notes and throughout this dissertation, there are certain concepts that just survive in their untranslatability, even if at the expense of a vaguer settler readability.⁸⁰ Just like a *luohti*, the immediacy of signifier and referent in a certain vocabulary is vulnerable to translations that would lead not only to a semantic loss but also of a deeper epistemic foundation. As Áilu Valle provocatively notes in his own *mutitalus* from the audio-anthology, the production of knowledge is not necessarily a matter of abstraction, extraction or translation into generalized terminological constants:

⁸⁰ As a result of the methodological choices outlined above, this thesis privileges Sámi texts and transcriptions as references, leaving certain pivotal terms untranslated in the indissolubility of their joint original plane of content and expression. An illustrative case can be found in the Sámi term *árbediehtu*, from *árbi* [inheritance] and *diehtu* [knowledge], commonly rendered in literature under the «Western managerial paradigm» known as Traditional Ecological Knowledge (TEK) (Ulturgasheva, Bodenhorn 2022: 30). Berkes (1999: 8) defined TEK as a «cumulative body of knowledge, practice and belief, evolving by adaptive processes and handed down through generations by cultural transmission». While TEK accounts for the processual and experiential nature of ecological knowledge, it universalizes and absorbs a diverse multitude of ways-of-knowing under a single commodified ontology. In doing so, TEK often treats Indigenous knowledge systems «as an object for science rather than as intelligence that could inform science» (Cruikshank 2005: 257). Translating *árbediehtu* into the managerial category of TEK flattens the complexity of knowledge transmission on a purely cultural inheritance, while *árbediehtu* operates within a framework where such distinctions do not subsist, and knowledge rather flows holistically between people, other-than-human companions and the Land as an indivisible entity (Porsanger, Guttorm 2011: 18; cf. Guttorm 2011; Sametinget 2021; Cusi et al. 2021). Similarly to *árbediehtu*, other terms in the following passages retain their vitality through untranslation. For these, I defer to the Indigenous literature where Sámi scholars provide more meaningful and relevant descriptions than I can offer from my own epistemic milieu and scientific lexicon.

Ja mun dal geavahan das dakkár komparatiivva-sániid. And now I am using these comparative words.
Ii dárbbáš veardadallat. You should not compare.⁸¹



On an ethical dimension – as emphasized in the section ‘Listen with, care’ – precedence was given to acknowledging the ontological and epistemological framework that informs the storytelling central to this research. Bringing Indigenous epistemes to the centre, the study aligns with the moral imperatives of epistemic justice and accountability, which often contrast with the academic integrity constructed in dominant scientific frameworks. Ethically, this practice is rooted in established guidelines for research with Indigenous communities, which emphasize the importance of co-designing methods and objectives, as well as of building upon historically silenced narratives to prevent the reproduction or reinforcement of colonial representational approaches that may undermine or harm Indigenous identities, values and knowledge sovereignty (WINHEC 2010; Pūtaiora Writing Group 2010; Muotka, 2020; Heikkilä et al. 2024). Free, Prior and Informed Consent (FPIC) were adopted as essential components of Indigenous peoples’ rights, particularly in relation to access to oral histories and ecological knowledge (United Nations 2007). In research dealing with cultural heritage and artistic practices, it was also essential to critically consider the ethical implications of intellectual property rights; in addition to adhering to the conventionalized General Data Protection Regulation (GDPR) and its articulation within both the University of Bologna⁸² and the University of Helsinki⁸³, Indigenous Data Sovereignty (IDS) principles have been applied (Carroll et al. 2020; Holmberg 2021) to advocate individual and collective right, across generations and species. This includes the researcher’s responsibility to uphold ethical standards defined by Sámi rights to oversee the collection, ownership, storage and use of data concerning individuals, communities, lands and resources. The use of audiovisual equipment was not solely aimed at documenting environmental sounds but also *juoiggus*, interviews, conversations and interactions, as this research addresses both sound ecologies and oral histories. Accordingly, the ethical considerations raised by audiovisual documentation also integrally applied, as well as those related with sensitive data (for interviews and oral interactions), with artistic ownership (for *juoiggus* and field recordings), and with the bioculturally sustainable conservation of biodiversity on Indigenous lands. This research involves two main categories of (human) participants: (1) Sámi musicians, sound artists, researchers, poets and other public figures who consented to be cited without anonymization; (2) elders

⁸¹ Valle 2024

⁸² [Data Protection in Research at the University of Bologna](#)

⁸³ [Data Protection in Research at the University of Helsinki](#)

and non-public figures, for whom steps were taken to ensure confidentiality of any sensitive information gathered in relation to community consent. Through an informed consent form (Appendix III) specifically designed for this socio-cultural framework – therefore, not only based on regulations detailed by my current academic affiliation but also by sovereign Indigenous institutions – each category of participants was informed about how the data would be recorded, stored, processed, handled and accessed. Participants were also given the right to withdraw from the research at any time before the final submission of this manuscript. Prior to submission, collected materials were securely stored in digital repositories, catalogued and analyzed, with part of the work conducted alongside Indigenous participants who continued to engage after the fieldwork's conclusion. Access to these materials was initially regulated to define, at a community level, the parameters for long-term preservation, bio-culturally sustainable accessibility, intellectual property policies and Indigenous Knowledge and Data Sovereignty (IKDS) within both the scientific community and Indigenous sound art. Some materials, following a dialogic selection and editing process, were communicated in multimedia formats – such as the audio anthology discussed in this section – in order to reach broader Sámi and non-Indigenous audiences beyond academia. Simultaneously, the collected field recordings were shared with various Sámi artists for the co-curation of local sound installations, podcasts and artistic works.

In the following sections, I elaborate on the methodological rationale behind my field recording practice, the employment of soundscape compositions and the engagement with Sámi storytelling in *Muitalusat guldaleami birra*.

Jienat⁸⁴

The collection of environmental sound recordings is undergoing rapid transformations, diversifying their intents from biodiversity conservation and educational purposes to artistic endeavors and broader entertainment projects. Among these diverse directions, soundscape conservation has quickly emerged as a global priority (Dumyahn, Pijanowski 2011: 1327). Environmental sound recording has served scientific agendas by treating environmental sounds as monitorable data whose systematic collection provides insights into wildlife (such as the identification and comparison of species and populations) and assesses their integrity or response to rapidly changing environments (Dumyahn, Pijanowski 2011: 1333; Erbe, Thomas 2022). Recently recognized as the Sixth Extinction, the rapid acceleration of biodiversity loss has prompted numerous institutionalized sound archives to collate environmental recordings due to the endangered and ephemeral nature of the sound sources, for their preservation and valorization (Ranft 2004: 456). A third conservative attitude follows the idea that certain natural

⁸⁴ “Sounds” and “Voices”

soundscapes, valued for their distinctiveness and/or fragility, should be protected from anthropogenic disturbances and designated for recreational and educational endeavors. In this context, the collection of environmental recordings treats “natural” sounds as heritagizable objects. The acquisition of environmental sounds for educational and entertainment purposes is prevalent in museums, zoos and natural reserves, as well as in documentary film productions, radio programs, and discographic publications (Alvarez-Morales, Díaz-Andreu 2024; Ranft 2004: 456). The motivations underlying the origins of the conservation of natural soundscapes are akin to those that used to guide the preservation of the world’s musical traditions by ethnomusicologists and ethnologists – with an intent to provide ethnographically accurate representations of places (cf. Gallagher 2015: 560). Reflecting on the foundation of these disciplines, Bruno Nettl and Anthony Seeger have emphasized how sound archives developed from an excessive interest in preserving “authentic” and “disappearing” heritages (Nettl 2015: 74; Seeger 1986: 262) – an interest that is deeply rooted in a Western colonial project that ambivalently aspires to the exploitation of materials, lands and people, while professing tasks and responsibilities of savior from the resultant devastation (Stern 2003: 27; Wright 2022: 13).

While over the 20th century, and even more rapidly in recent decades, Anthropology and Ethnomusicology have adjusted directions coming to realize that such an approach to collection reinforces colonial attitudes to cultural objectification, crystallization, subjugation, extraction and top-down classification, little discussion yet exists around bioculturally sustainable practices for the recording and preservation of environmental sounds. And while it is indisputable that the ongoing Sixth Extinction and the resultant biodiversity loss urge for global soundscape conservation efforts, the generalizing ethics and the set of methods employed in these acts of sonic salvation are only now starting to be critically addressed within the respective disciplines. This critical examination is driven by recent claims from communities that signaled a growing awareness towards the severe material and immaterial consequences of the past conservationist practices, driven by colonial logics of extraction, appropriation, objectification, and displacement. The current gap in established and sustainable guidelines for co-designed and participatory archival practices – capable of granting intellectual sovereignty to communities over their own sonic heritage – is addressed on transdisciplinary grounds through a multitude of theoretical approaches inspired by feminist theory, decolonizing methodologies and local/Indigenous knowledge (Robinson 2020; Wright 2022; Kanngieser 2023).

Stó:lō/Skwah philosopher Dylan Robinson posits hegemonic ways-of-listening and collection practice as «a settler’s starving orientation» which is as hungry as the colonial aspiration of always longing for new resources to exploit, extract (Robinson 2020: 2). Derived from this tendency, the act of collecting and archiving sounds within Western institutions cannot be simply passed as an unaffected

process of altruistic preservation, but rather a hierarchical selection of subjects that are top-down valued to varying degrees as collectible (Wright 2022: 16). In defining soundscape conservation, Dumyahn and Pijanowski (2011: 1329) refer to the “collectible value” of sounds as something of merit, «something estimable whether or not such worth is assigned or recognized by people» (cfr. Harmon 2003: 13). While the authors recognize that «human perceptions and responses to sounds [...] are not universal», the association of values in soundscape conservation policies rarely takes into account local acoustemologies that associate subjectivity to the land, rather relying on top-down naturalistic hierarchies shaped by what geographer and sound artist AM Kanngieser calls “sonic coloniality”. As introduced above, sonic colonialities are «structures of listening and sense making that are founded on, and reinforce, Anglo-European onto-epistemologies of humans in relation to, and distinct from, nature» (Kanngieser 2023: 692). At a time in which both Humanities and Natural Sciences increasingly situate the sense of listening at the center of methodologies devoted to building reparative, ethical and reciprocal relations between cultures and environments, Kanngieser argues that listening itself cannot enact any epistemological liberation until encultured ways of listening and documenting environments keep perpetuating colonial ideas of nature as «possessable» (ibid: 690).

While listening is a skill shared across Earth beings, albeit with notable epistemic plurality, field recording emerges from and is shaped by the extractive desire of a Euro-centric ear, historically rooted in objectifying practices «intrinsic to the colonizer’s toolkit» and built upon asymmetrical encounters between recordists and the recorded (Wright 2022: 15). For this reason, adopted as a leading method in my research and in the audio-anthology, it is necessary in this section to critically address field recording not as a neutral act of documentation, but as a practice embedded in power dynamics and shaped by the legacies of colonialism:

representations based on the decisions and presence of authors, whether heard in the audible signal or not. Technical choices mediate the field: positioning, perspective, sample rates, and microphones orientate the contact zone of recording. Cuts, fades, plug-ins, compression, and layering filter the elsewhere field of the edit suite. There is a processual chain of interpretation involved in how field recordings become field recordings, passing through human, nonhuman, and technological gates along the way. (Wright 2022: 149-150)

With a similar epistemic matrix, soundscape composition as research practice was theorized and cultivated starting in the late 1960s within the World Soundscape Project at Simon Fraser University in Vancouver. Barry Truax defined it as «a well developed model for the musical use of environmental sound» (Truax 1996: 63). Although this definition may imply a purely aesthetic intention, Truax emphasizes the significance of the listener’s ability to recognize source material and posits that such compositions should be compelled to enhance our comprehension of the world (ibidem), particularly by fostering «the re-integration of the listener with the

environment in a balanced ecological relationship» (Truax 2008: 106). Thus, soundscape composition transcends mere musical uses of sonic environments; akin to documentary filmmaking, it seeks to incorporate reality and make sense of it (Reich 2016: 68). As such, bridging between artistic practice and scientific observation, soundscape composition aligns with Clifford Geertz's notion of "blurred genre" (Geertz 1980).

Steven Feld's work with the Kaluli displays the potential of soundscape composition to effectively bridge ethnographic and artistic methodologies. He defined his own practice as «an anthropology of sound and through sound, a representation of culture that is both a pleasure and an intellectual provocation [...] where [he] could maintain a creative and analytic relationship to both the materiality and sociality of sound» (Steven Feld 2004: 468). This emerging approach to ethnography presents unprecedented means for communicating research and return knowledge. Ferlaino and Scaldaferri emphasize how, in contexts where listening takes precedence over observation in local ways of knowing and transmitting knowledge, soundscape composition emerges as an ethnographic «tool capable of revealing aspects of a phenomenon that would unlikely be communicated simply by ethnographic text» (Ferlaino 2024: 2; cf. Scaldaferri 2017). Field recordings also unfold along a temporal dimension that serves as the foundation for their material development and that aligns more closely with the temporality of experience, while writing about sounds, on the other hand, tends to be oriented toward extra-experiential explanation and interpretation (Ferrarini 2011: 9). As it moves beyond the written page, this approach also aligns and resonates with the decolonial horizons of Indigenous Studies. It challenges the historical dominance of text and academic tones in ethnographic writing practices, which tend to objectify and appropriate the Other to serve the interests of the ethnographer's own societal and institutional milieu over those of the very interrogated subjects (cf. Kuokkanen 2007). As mentioned above, Indigenous and allied scholars are fostering the introduction of alternative onto-epistemologies in research practice aimed at reimagining ethnography from a discipline primarily about observing – a sense that implies distance and detachment – to one about *listening* – a practice embodying receptivity, copresence, attention and care (Kvalsvik 2019; Robinson 2020; Wright 2022; Kanngieser 2023).

Listening as epistemological paradigm is a cornerstone in Sámi studies (Kuokkanen 2000; Valkeapää: 2001; Skaltje 2005; Gaski 2019; Kvalsvik 2019; Finbog 2022). *Gullat* [to hear] and *guldalit* [to listen for]

[have] always been respected and regarded as a vital competence for our ongoing survival, not only as Sámi but as human beings in general. It has required affinity and adaptability to our surroundings, and has been transferred through stories and references to specific people and occurrences that have emphasized its importance. (Gaski 2019: 262)

However, today more than ever before, listening is experiencing a sort of golden age, with increasing institutional support for a diverse array of events dedicated to the exploration of sound and listening through artistic practices, museal installations, academic research and activism. The incorporation of field recordings and soundscape composition in Sámi art has a profound legacy within modern music production (Ramnarine 2009; Renzi 2021a, 2023b). Already in his seminal record *Joikuja* (1968), Nils-Aslak Valkeapää wove field recordings of wind and reindeer herding into his joiking. This sensibility to environmental sounds was further developed in 1994 with a symphonic piece entirely made of bird vocalizations and waterscapes (Valkeapää 1994; cf. Ramnarine 2009). The extensive embrace of soundscapes in music production has continued to evolve, from the experimental works of Johan Sara Jr. (2016, 2017, 2019) and Elina Waage Mikalsen (2020, 2023) to more popular productions – like Ailu Valle’s latest album, which alternates between soundscape compositions and rap songs (Valle 2020). Hence, the integration of other-than-human voices in Sámi music is emblematic of an artistic expression that is attentive of sound ecologies and Indigenous modes of engaging with the world through sounding and listening, in a way that also highlights the intersections of political ecologies and environmental activism (Ramnarine 2009; Renzi 2021a, 2023b; cf. Kvalsvik 2019). Adopting soundscape composition as ethnographic and artistic method in participatory research consequently became a way to creatively engage with Indigenous sonic knowledge while holding aesthetic and epistemological value within the community (Coleman 2021: 140). This multimedia output not only facilitates a more direct communication and relevance to its intended original audience but also empowers human and other-than-human participants to assert their voice and unique “points of listening”.

Participatory approaches complemented every stage of the project, spanning from the co-design of the audio-anthology to field recording and audio editing. Representative community members took part in binaural soundwalks and informal recording workshops,⁸⁵ selecting a wide range of microphones and subjects to record (Figures 7–8).⁸⁶ These activities were intended as dialogic ways

⁸⁵ Monitoring a binaural recording is an enchanting experience. Especially for first-time users, it creates the mixed sensation of recording with their own ears, listen through someone else’s ears, and even expanding their auditory perception to hear more than what is typically perceived. This primarily depends on the directionality of the capsules, which is narrower than the broader range of our auditory system, as well as on the setting of the gain, which might be louder than the natural sound pressure levels. The surprise feeling experienced during the first encounters with binaural audio often resembles a “revelation”, leading to fresh reflections on human auditory perception and encouraging individuals to pay greater attention to the act of listening. Therefore, the binaural soundwalk became a favored activity conducted, if possible, with select research participants.

⁸⁶ It was not uncommon during conversations with research collaborators for someone to ask whether I had the opportunity to record the rare song of a particular tundra bird, the vocalizations of marine mammals along the coast, or the thunderous sound of ice forming on a lake. I was constantly taking notes and, like a *bivdi* [hunter], those sounds would become my objective for the following days. When it was not possible to carry out recordings accompanied by research participants, I sought instructions on the spots, times and weather conditions for recording specific

to encourage the emergence of an ideal Sámi posture of listening, which supposedly differs from mine, as a non-Indigenous and non-local listener (cf. Robinson 2020). The act of recording sound, much like listening, involves bodily techniques that are contextually informed and skilled. The choice of a directional microphone over a spatializing set-up implies a selection made by the listener-recordist, which not only reflects a posture of listening that is both personally significant and culturally situated but also makes other audiences monitoring the recording aware of this original aural process and active presence in the listening space (cf. Ferrarini 2011: 24). Coincidentally, this approach was also designed to facilitate a dialogue and a co-creative process, rather than a one-way extraction and communication of knowledge typical of academic research production.

Because of the extensiveness of both times and geographies in the field recording work, however, most of the recordings featured in the audio-anthology were planned and carried out as solitary activities, although always recurring to guidance regarding the best locations, timings, and conditions depending on the subject of the recording – a consistent aspect of the entire fieldwork. The initial aim of this research project was an attempt at mapping the diverse ecosystems in Sápmi and investigate their biocultural significance. The recording practice started from geophonies and biophonies in different ecosystems of the Arctic, such as tundra, taiga, wetlands, freshwater, coastal, Arctic tidal, alpine tundra and Arctic Ocean ecosystems.⁸⁷

subjectivities. Everything was new to my ears, in every space and at every time of the everchanging polar year. I, thus, sought local advice to navigate through the apparent quietude which rather manifested as entangled complexity of Sápmi ecosystems. In most instances, the obtainment of a certain recording was not explicitly commissioned to me throughout the conversations with research collaborators. Rather it was a personal decision to go out and look for sounds that held significance in the conversations with participants, and in turn for this research too. In other cases, however, I was given true (although informal) commissions to capture specific sounds for artists or institutions. Svein Lund, one of the founding members of Guovdageainnu Meahcceguovddáš (Kautokeino Nature Center), invited me to look for the sounds that characterize the Municipality of Guovdageaidnu (see Bohccuin). As the Nature Center is currently expanding to incorporate multimedia museum materials related to the local environment, the goal was to obtain isolated recordings of avian diversity, as well as sounds with specific biocultural significance within the area. These included the sounds of lake and river fishing, the sounds of duodji or the sounds of *fádn* (an ephemeral aerophone considered extinct in the historical sources and made from the natural green stalk of the *Angelica archangelica*). Sámi DJ and sound designer Markus Thonhaugen, also known as DJ Idja, commissioned me geophonic recordings of wind turbines for an upcoming sound installation aimed at exploring the impact of windfarms on reindeer herding. Sámi percussionist and researcher Jakop Janssønn, as well as Sámi filmmakers and visual artists Jenni Laiti and Lada Suomenrinne commissioned me hydrophonic recordings respectively for a podcast episode (Janssønn 2024) and a short film (Laiti, Suomenrinne 2024).

⁸⁷ During the winter and spring, the Arctic sensory deprivation extended to the sense of hearing too. I dedicated time to capturing sounds like ice cracks, snowfalls, and the geophonic interplay between wind, snow and frozen surfaces. I also recorded the calls of a few winter birds, such as *rieussat* (*Lagopus lagopus*). As the temperature drops below -30°C, sounds decrease in speed and travel longer distances. This made it intriguing to compare recordings taken with identical setups and in the same locations during various seasons. In the summer, I prioritized hydrophonic recordings of roaring waterscapes, and geophonic interactions between the wind and the diverse vegetation of each environment. During the warmer months, I also focused on capturing the sounds of insects, particularly Arctic flies and mosquitoes, as well as recording algae and microorganisms in wetlands

Moving beyond the ethnographic possibilities of field recording and soundscape compositions and turning to its ecological intents, this practice prompts listeners with «an opportunity to develop an expanded perspective and empathy towards other forms of life» (Reich 2016: 34). Technology makes it possible to translate acoustic environments in more digestible formats, compressing the sounds of entire days or seasons into more concise compositions, or shrinking Sápmi's geographical vastness and ecological diversity in one multi-channel recording. Technology also enhances the audibility of subtle sounds and captures sounds transmitted through various mediums, whether liquid or solid. As Guttorm et al. highlight in their *manifesto* to invite *Eana* into research-storying, «there is not much space left for non-human entities in the language-based scientific texts, even though their existence were described or analysed» (2021: 119). By inviting diverse audiences to listen from unusual perspectives, soundscape compositions reveal the intricate echosystemic relationships that exist among various beings, transcending spatial, temporal and material boundaries. According to Megan Reich, it is through this process that we realize something is communicating through sound, and therefore is alive and sentient (ibid: 39). Soundscape compositions in *Muitalusat guldaleami birra* were hence collectively embraced to creatively render the diversity of Sápmi echosystems and learn from the unique histories of listening as told by other-than-human voices. A multimodal recording approach was adopted as a thorough attempt at representing the complexity of each echosystem, encompassing voices of wind, rivers, sea-waves, ice, rocks (geophonies), voices of animals, plants, fungi, micro-organisms (biophonies), voices of people and human activities (anthropophonies), and voices of machines and technology (technophonies).⁸⁸ The heterogeneity of the microphonic capsules embraced and the optimal sensitivity of the chosen field recorders enabled me to capture nearly every audible and inaudible sound source within the Arctic echosystems throughout the polar year (see Appendix I). In addition to standard field recording techniques,⁸⁹ during fieldwork I developed two specialized microphonic practices that further illustrate the multimodal approach underpinning my methods (Figures 9–18).

The first technique, which I named “Jearahallan jogain” [Interview with a watercourse] was formulated in dialogue with Johan Sara Jr., who in 2010 produced an experimental track aimed at capturing the diverse voices emanating

and fjords. In that weather, I trusted more my equipment, leaving drop rigs overnight to capture sounds of ground wildlife and the dawn and dusk choruses of birds.

⁸⁸ As previously mentioned, these classes mirror Western taxonomies that dually distinguish between human and natures, as well as between biotic and abiotic (Farina 2014). While such classes inevitably clash with Sámi onto-acoustemologies, they remain useful for differentiating the physical nature of sound transmission.

⁸⁹ To accurately capture the spatialization of sounds in the recorded environment, I opted for a classic A-B setup using two highly sensitive omnidirectional microphones spaced 50 cm apart. This configuration creates a sufficiently wide stereophonic image, reliably reproducing the reverberant sound field while preserving essential spatial information. Additionally, the A-B setup optimizes the exceptional low-frequency response of omnidirectional microphones, enabling the capture of subtle sounds that emerge from a quiet background (Figure 9-10).

from a river and its dialogue with surrounding sounds (Sara 2010).⁹⁰ This method provocatively addresses one of the original stimuli behind the genesis of this doctoral project (see above). In attempting to record the stories recounted by full range of voices from a stream or wetland habitat, it is essential to employ a poly-organic microphonic practice. This included a tetrahedral array of cardioid capsules for ambisonic recordings, a matched pair of omnidirectional microphones for capturing wide stereo ambiences, a hyper-directional microphone for isolating or closing-up specific biovocalizations, hydrophones for detecting underwater propagations and the voices of aquatic and surface life, a geophonic sensor to monitor soil vibrations and moss moisturizing, and various contact microphones to capture interactions between the stream, stones, and the low vegetation occasionally splashed by the water. This microphonic practice, spanning across beings and sound propagation media, encourages a «decentering of listening as an activity exclusively between the voice and the ear, extending to the vibrational aspects that allow for the inclusion of non-human and more-than-human perceptibilities» (Kanngieser et al. 2024: 4; cf. Bawaka Country et al. 2016; Gallagher et al. 2017).

The second multimodal technique, which I named the “aural tree”, also develops from this very decentering ground. Unlike the first technique, which originated from fieldwork discussions and Sámi acoustemologies, the aural tree emerged from an extension I felt compelled to consider with regard to the widely known “tree ears” drop-rig method in field recording.⁹¹ In the “tree ears” practice, a matched pair of omnidirectional microphones is taped to opposite sides of a tree trunk, roughly 20 cm apart, to approximate the distance between human ears. Field recordist George Vlad describes this as a way of «listening to the environment from the perspective of a tree, as though trees have been hearing it for millions of years». Upon critically confronting this technique, two interconnected issues emerged. First, the “tree ears” approach anthropomorphizes the tree. Not only does Vlad evoke the idea that «grooves and notches in the tree trunk act much like the features on a human face, gently focusing or reflecting certain sounds», but it also implies that the tree’s capacity to aurally perceive the environment relies on the anthropic application of microphones, and in a way that mimics human physiology (ibidem). Second, and related to this, even if a tree does perceive sound as we intend it, it is unlikely to do so in a manner akin or close to human hearing. As Kanngieser et al. noted earlier, sound is transmitted through various matters, not just air. Tree roots pick up faint

⁹⁰ The song is the 2nd track “Vuolggán juostá - Somewhere I Start” of the album *Rievdadus – Transmission* (Sara 2010): <https://www.youtube.com/watch?v=CJmN3BlRSK4&pp=ygUlVnVvbGdnw6FuIGp1b3Now6EgLSBTb21ld2hlcmUgSSBTdGFydA%3D%3D>

⁹¹ Drop-rig methods describe a recording practice in the absence of the field recordist. The gear is set up and left behind, often for overnight or prolonged recordings, to capture any sound occurring while the recording is in progress. Therefore, drop rigs are ideal for capturing extended recordings that would otherwise be challenging to achieve – especially in extreme weather conditions like those imposed by the Arctic.

vibrations from the soil, as well as liquid and decaying nutrients underground. Similarly, branches and leaves interact with atmospheric agents, such as wind, rain and sunlight, as much as with insects and microorganisms. To maintain a drop-rig set up and the tree's point-of-listening elicited by a supposedly eco-centric "tree-ear" technique while, at the same time, addressing issues of polyvocality beyond human, I integrated the omnidirectional microphones on the trunk with geophonic recordings of soil vibrations near the roots, hydrophones capturing small streams or ponds connected to the tree's foundation, and piezoelectric recordings of the movements of branches, leaves, and the sap flowing through the trunk. In fact, trees contribute their own sounds, adding a subtle breathing-like flow to creaks and vibrations of the resounding wood. Although this remains a speculative, creative practice that still carries some degree of anthropomorphic attribution, the "aural tree" technique produces recordings that more closely approximate the interconnectedness of other-than-human voices and dialogues unfolding in an echosystem (Figure 19).

Thus, in this dissertation, field recording is understood as a method for the documentation, construction, and mediation of a horizontal network of human and other-than-human voices – both audible and inaudible to the human ear – alongside the interwoven temporalities unique to each subjectivity. As concisely and effectively defined by Mark Peter Wright, «[f]ield recordings are vulnerable conduits of knowledge; they demand imaginative critical strategies of audition across all fields of listening» (Wright 2022: 78). This raises several questions about the adoption of field recordings and soundscape composition in the audio-anthology. For instance, what is hidden or silenced behind the raw acoustic data that field recordings aim to collect and preserve? How can we approach soundscape conservation and heritagization when faced with plural and often contested sound ontologies and acoustemologies? And who holds the authority to assign value to soundscapes as collectible, preservable and heritagizable objects? To attempt resolving these critical questions, *Muitalusat guldaleami birra* turns to Indigenous storytelling as a means of verbalizing contextually relevant epistemes of sounding and listening. As Steven Feld insightfully remarks,

[a]coustemology begins with acoustics to ask how the physicality of sound is so instantly and forcefully present to experience and experiencers, to interpreters and interpretations. It joins that concern to epistemology to investigate sounding and listening as a knowing-in-action, a knowing-with and knowing through the audible. Listening to histories of listening is one methodological approach to making connections between acoustics and epistemology. (Feld 2015c: 93)

In the combination of soundscape compositions and histories of listening informed by local epistemes, a process of sonic heritagization goes beyond simply safeguarding raw acoustic materials and information; rather, it starts to illuminate how and why certain environmental sounds are locally valued, and what they signify

within intricate biocultural ecosystems. Moreover, this combination validates the essential role of Indigenous voices and epistemologies, revealing and preserving kinships between humans and other-than-humans (also technological) that have historically been silenced by dominant soundscape collection and conservation practices.

The incorporation of Sámi storytelling alongside the collected environmental sounds in *Muitalusat guldaleami birra* posits an alternative methodology for defining and conducting ‘soundscape conservation’ and heritagization. As researchers dealing with sounds and voices, we bear the responsibility to critically engage with this area of practice, promoting and embracing bottom-up approaches rather than imposing generalized comparative models. This approach originates from advocating for bioculturally relevant and context-specific recording methods, emphasizing the acknowledgment, consultation and amplification of local acoustemologies (cf. Feld 1984). Upholding the self-determination of Indigenous communities towards the ecosystems they have valued from ancestral to present times is essential in resisting both overt and subtle acts of epistemic violence and erasure within conservationist practices. And even when the collected ecosystems are presented as pristine, seemingly untouched by anthropic presence, Indigenous storytelling imbues these sounds with experiential knowledge and life stories while, to borrow Katie Hemsworth’s words, it also invites «critical recognition that sonic environments tell their own stories of the effects of [...] colonialism» (2017: 149).

Muitalit⁹²

Soundscape compositions in *Muitalusat guldaleami birra* weave a tapestry of ecosystemic relationships that, alongside bioacoustic information, carry situated knowledge, memories and sentiments. In the attempt to listen beyond acoustics, I often ask my Sámi friends: what do these *jienat* tell us? In the synthetic confluence of their responses, every *jietna* represents an ancestral echo or a present warning. Every *jietna* is sometimes a source of conversation, sometimes of *juoiggus*. Every *jietna* is also a smell, a shade, an aroma, or a tactile sensation. Every voice tells a story. To engage with the plural biocultural values intrinsic to each recorded sound, and to vehicle ecosystems through engagement with Indigenous epistemes, each soundscape composition in *Muitalusat guldaleami birra* is paired with a story [s. *muitalus*, pl. *muitalusat*]. The *muitalusat* – narratives based on real experiences compared to a *máinnas*, which are made-up stories (Gaski 2019: 263) – serve as a complementary communicative medium in the anthology, providing biocultural context and commentary to the accompanying soundscape composition.

Stories are a foundational and vital component of knowledge transmission across cultures (Cajete 1994; Kovach 2009). They mirror experiences of individuals

⁹² “To tell”

and communities, animating and making memorable the vibrant reciprocities and affections that are too often overlooked within the prevalently analytical and (re)interpretative approaches of dominant research practices (Bagele 2012: 139; Datta 2018: 36). Storytelling as a contextual way of understanding, relating, and making sense of the world has only recently begun to receive methodological attention in academia, driven by Indigenous scholars and decolonizing research practices. Nêhiyaw/Saulteaux scholar Margaret Kovach encapsulates this approach in Indigenous research as

a method of gathering knowledge based on oral storytelling tradition congruent with an Indigenous paradigm. It involves a dialogic participation that holds a deep purpose of sharing story as a means to assist others. It is relational at its core. (Kovach 2009: 42)

In Sámi research, incorporating traditional storytelling into the methodology is a way to make Indigenous paradigms audible to the Sámi themselves while also making them intelligible to broader audiences maintaining a bioculturally appropriate and sustainable practice (Hirvonen 2011: 16; cf. Porsanger et al. 2021: 153). Sámi scholar Ellen-Marie Jensen emphasizes that integrating personal stories and memories into academic writing is a way of «doing justice» as this practice «involves giving credit to others and providing space for the voices of those who are involved or could be affected by the outcome» of research (Jensen 2012: 107). In this sense, it also inscribes life stories, memoirs and anecdotes within a shared communal history, «keeping with the ways that Indigenous peoples have traditionally shared knowledge about members of their communities» (ibidem). An etymological insight in Davvisámegiella reveals an idiosyncratic relationship between the root of the verb *muitalit* [to tell] and the substantives *muitu* [memory] and *muitalus* [story], as well as the verb *muittit* [to remember], showing a close semantic interdependence between these actions and their objects of communication (cf. Cocq 2008: 41; Finbog 2022: 27). Maj-Lis Skaltje further argues that storytelling as a research method gives voice not only to people's memories but also to the environment in which these stories are situated (Skaltje 2005: 6). The interdependency of Land and storytelling — which Cariou (2020) creatively label as “territory” — underscores a sense of belonging and a relational ontology rooted in the deep, longstanding connection between Earth beings and the Land (Feld 2024). As Kovach eloquently states, «[s]tories remind us of who we are and of our belonging. Stories hold within them knowledges while simultaneously signifying relationships» (Kovach 2009: 94). Again, a lexical consideration reveals how in Davvisámegiella the verb *gullat* [to hear] also conveys the meaning of “to belong” [*gullat*]. Learning to hearing and listening-with one's surroundings shape an individual's sense of belonging to the relational ontology embedded in the place (Feld, Basso 1996).

In Sámi orality as much as in many other Indigenous contexts, storytelling presents an epistemological way of connecting with each other's experiences

through memory (Utsi 1998; Gaski 2019; Finbog 2022a; cf. Cruikshank 1998; Franceschi 2006; Barlo et al. 2020). The act of remembering and telling stories involves *muitaloadji* [storytellers] in a state where they are simultaneously narrators and listeners, engaged in space-time reciprocities with people and environments (cf. Gaski 2019: 262; Porsanger et al. 2021: 153). Similar to *luodit* in *juoiggus*, memories ‘come’ and can be skillfully caught and given voice to recall and communicate past experiences or distant places into the “here” and “now”. As a result, and given that knowledge about Sápmi ecosystems is deeply rooted in the multifaceted *árbediehtu*, *juoiggus* – which also encompasses a traditional storytelling practice – has been implemented by some of the *muitaloadji* in the storying as an optimal repository of Sámi acoustemologies; a means to preserve and transmit the intimate relations and memories people hold with their local ecosystemic knowledge. This flexibility of modes and tones in the reconstruction of a Sámi history of listening within the audio-anthology empowered each storyteller to recount their personal sonic experiences in a meaningful and contextually resonant way, without requiring specialized aural training or a heightened awareness of isolated sound events.

If listening is a reciprocal act, a history of listening cannot merely encompass a collection of stories about sounds as detached from holistic cognition, nor is it solely a chronicle of accounts of sonic experiences and how people listen (Peterson, Brennan 2021). Rather, histories of listening illustrate how people, communities and the Land relate more broadly, and how these relations are woven together and through mutual temporalities:

stories are told all at once, growing into one another, manifesting as a circular weave that may touch upon multiple aspects, but that always relate to the central point. (Finbog 2022a: 28)

Discussing aurality in ethnographic research can be challenging, often resulting in vagueness and abstraction. This is partly due to the relative intangibility of sound phenomena but is also a consequence of the fact that listening is experiential and, as such, it is immediate and often precedes conceptualization (Ingold 2000; Robinson 2020). Sámi storytelling and *luodit* have proven more adept at verbalizing sonic knowledge compared to conventional interview methods, as they comparably build on experiential knowledge and individual or collective memory (Utsi 1998). Both storytelling and *luodit* allowed for the gradual and natural emergence of sensory knowledge and proved to be culturally relevant and resonant, thus being a more effective means of conveying the complex epistemological aspects of the project.

The experiential nature of Sámi storytelling also validates the recognition of how, as part of a holistic experience of reality, aural knowledge should not be «sliced up along the lines of the sensory pathways» (Ingold 2007: 1). Such synesthetic attributes of the storytelling in *Muitalusat guldaleami birra* emerge particularly

from the histories of listening shared by Ellen-Johanne Kvalsvik (Appendix II.6) and by Ida Emilie Lindseth Marakatt (Appendix II.8), both instinctively emphasizing the indissolubility of each soundscape from smells, colors and other sensations that, together, harmonize the sense of a certain place. From Ellen-Johanne's *muitalus*:



I grew up on an island a bit out in the sea, where the seascape is dominating with the sound of the ocean, the sound of different birds. And when it's nice weather, the sea gently pushes towards the shore. And at the same time, it's affected by the seaweed that kind of rustles like with the leaves. And of course, you have the smell of the ocean. When you have lived out there for long, you don't notice the smells that much. But if you go away and come back, then you notice the smells. [...] The sea is connected to the smell seaweed, that is lifted up on shore and placed in the sun. And as it decays, it can smell very strongly. [...] So, that is all part of the sensations of the seascape. And it's very blue. Everything is blue. And the grass that goes all the way up to the mountain is of a very intense light green. But when you come here to Alta, the soil is orange and dark green. So, it is different colors, different smells, different sounds from the sea and the islands to this semi inland. (Kvalsvik 2024)

With a similar sensibility, Ida Emilie Lindseth Marakatt shares her auditory and olfactory familiarities with all-terrain vehicles (ATVs):



<i>Bajášadden máddin, stuorra</i>	I grew up in the south, in a
<i>gávpogis.</i>	big city.
<i>[...] Ja de go mun ledjen unni, mii</i>	<i>[...] And when I was young, every</i>
<i>láveime juohke jahki, juohke</i>	<i>summer of every year, we used</i>
<i>geasset, mannat davás.</i>	<i>to go to the North.</i>
<i>Mun muittán ahte dat mii lei buot</i>	<i>I remember that the most fun</i>
<i>suoháseamos, lei go áddjá váldii</i>	<i>time was when áddjá used to</i>
<i>min mielde skooterin vuodjit dahje</i>	<i>take us with him driving the scooter or</i>
<i>ATV.</i>	<i>the ATV.</i>
<i>Ja mun muittán ahte ovttatmano</i>	<i>And I remember that the moment</i>
<i>go son dego álggehii dán motora,</i>	<i>he started the engine,</i>
<i>ahte de mun dihten ovttatmano</i>	<i>I instantly knew "okey, now we are</i>
<i>ahte "okei, dál mii leat jođus. Dál</i>	<i>on our way. Now we are going</i>
<i>mii áiggut vuodjit".</i>	<i>to drive".</i>
<i>[...] Ja go mun gulán dán áiggis</i>	<i>[...] And when I now hear the sound</i>
<i>dien, aistton go motora álggá, dat</i>	<i>that the engine makes as it starts,</i>

<i>addá hui ollu muituid munnje ja</i>	it brings back so many memories to me
<i>hui olu vásahusaide maid bohtet</i>	and many experiences
<i>ruovttoluotta; eronamaš dál go mu</i>	come mind;
<i>áddjá lea jápman.</i>	especially after áddjá passed.
<i>Ja maddái dan hádja masa dan</i>	Oh, and the smell
<i>addá.</i>	they give.
<i>Dat ii lea dušše jietna, muhto</i>	It is not just the sound, but the smell of
<i>maddái dien bensinhádja maid mu</i>	the fuel too, in my opinion...
<i>mielas... Dat addá munnje diekkar</i>	That brings back beautiful memories
<i>finat muittuid oaivái muhto mun</i>	to my mind, although I know
<i>diedan muhtumiida geat várra</i>	some would say that it is not
<i>livččet dadjan dat ii leat nu buorre.</i>	healthy or good. ⁹³

With this respect, Ida's story is particularly notable as she is the only *muitaleaddji* in the audio-anthology who grew up and — despite her journalistic work often calling her to the North — still resides outside the traditional Indigenous homeland. Moreover, this excerpt from her narrative also provides another methodological insight into how each *muitaleaddji* infuses their *muitalus* with fragments of own individual life stories, fostering a humanizing reflexivity that moves away from abstraction and theorization, and instead, by drawing from lived experience, enables audiences to engage in a more empathetic and ethically grounded aural attention.

As pointed out by Smith and Watson, rather than being a narrative genre, autobiography as a form of life narrative is a discourse that goes «beyond printed life story» (Smith, Watson 2010: 3). Because of their visibility and diffusion in Euro-American literary framework, written forms of the autobiographical are today the most evident case of self-life narrative (ibid: 4), while instances of self-narratives among peoples whose knowledge and history are primarily orally transmitted have long been scarcely considered and heard (Renzi 2021b). In ethnographic practice, life stories and autobiographies have often been treated as sort of unspoken methodological oversights, largely dismissed because they did not meet the scientific and authoritative criteria expected in academic research (Franceschi 2006; cf. Cruikshank 1998). In Sápmi, narratives of personal experience — including those encoded in *luodit* and *dajahusat* — dominate in terms of ubiquity among all storytelling varieties although, as Koskimies et al. note, «for most early story collectors, they took a back seat to the study of myth, fairy tales, and legends» (Koskimies et al. 2019: 174). Yet, personal experiences and anecdotes offer unique insights into fragments of everyday life, customary practices and biocultural interactions that often struggle to emerge from other genres of storytelling.

Life stories account for change, growth, conflict and resilience (ibid: 175), revealing a dynamic nature that manifests not just inward, but also highlights the

⁹³ Lindseth Marakatt 2024

evolving position of each individual within their communities and the broader ecosystem – as the case of personal *luodit* and self-*luodit* pertinently illustrate (Renzi 2021b). They represent true «archives and libraries, as the place we keep our knowledge» (Finbog 2022a: 28). Consequently, bits and pieces of life stories in the audio-anthology also fully contribute to bridging knowledge gaps, enhancing understandings of world- and meaning-making from both intimate and communal listening perspectives (cf. Ranco, Haverkamp 2022).

The most exemplary case of a life story in *Muitalusat guldaleami birra* is represented by the opening *muitalus* shared by Johan Sara Jr., whose title – “Man dihte dat šaddai nu ahte mun šadden diekkar jietnaolmmoš”⁹⁴ – explicitly highpoints the autobiographical nature of the narrative, as well as the classic storytelling hook in the opening line (Appendix II.1):



<i>Da álggii dalle go mun ledjen manná, bárdni, vihtta jagáš. Mun ledjen hui ángir studeret dán maid eadni lávii hommet, áidna son lei hui ángir fas báddet eará juoigít ja maiddái iežas go juoigii.</i>	It all started when I was a child, a boy, five years old. I was very eager in learning the things my mom used to do, and – you see – she was very interested in recording others joik and herself when she joiked.⁹⁵

Similarly, in the *muitalus* shared by Mathis Eira, the autobiographical focus provides context for the development of particular aesthetic and affective sensitivities toward familiar sounds experienced since childhood and throughout life (Appendix II.4):



<i>Mun jahkán ahte jus mun dál muitalan ahte aistton dalle go mun alggus riegin, ahte ovttá daid vuosstaš dingaid maid mun gullen, dat lei diedusge eadni go son juoigii ja ainna da lei dan maid mun gullen olu. Eadni ainna juigii hui olu go mun ledjen riegin dahje mannávuodas ja dasa lassín maiddái Duvva kasehttaid guldalan luđiid ja nie.</i>	I think that, if I now recall the time when I was born, one of the first things I remember is certainly my mother joiking – at least that is something that I heard a lot. You see, my mother used to joik very often when I was born and throughout my childhood. In addition to this, I also listened to <i>luodit</i> from Duvva cassettes and so on.

⁹⁴ “How I came to be such a man of sounds”

⁹⁵ Sara 2024.

<i>Nu mun jahkán da leat guldalit lagás olbmot, eronamašit juoigat, mun jahkán da lea dego vuosstaš dinga maid mun muittán, ja dego ovttaláhke hábmén nugo mun olbmožiin ja maiddái hábmén mo mu eallin šaddai go diedusge mun lean juoigin ja juoigan olu.</i>	So, listening to the people close to me – especially their joiking – I believe it is one of my earliest memories; one that, in a way, has shaped me as a person and influenced the path my life has taken since, of course, I am a juoigi and I joik a lot.⁹⁶

Another example is offered by the concluding story, shared by Inger-Mari Aikio. Here, the autobiographical anecdote serves as a digression, tracing the storyteller's travels around the world in a comparative assessment of certain Sámi and foreign ecosystems encountered throughout her life (Appendix II.10). In the *muitalus* shared by Áilu Valle, distinctly, autobiographical introspection contextualizes a moment of encounter with the specific sonic subjectivity at the center of the narrative, as well as the relevant acquisition of listening skills (Appendix II.9).



<i>Lean leamašan diená, mánnávuoda rájes hui liikostan lottiide ja mun lean diedusge daid dutkan dalle jo mánávuodas olu ja mun lean tevdnen buot diekkár loddegirjjiid ja buot diekkáriid, ja oahpahállan dait lottiid jienaid ja diená ahte dat lea leamašan munnje diená nugo ustibat</i>	I've always been this way. Since childhood, I've had a deep love for birds and spent so much time studying them. I used to draw my own bird books and all these things about them. And I learned to recognize their voices, and over time those birds became like friends to me.⁹⁷

Similarly, in Kristine Eira's *muitalus*, the autobiographical excursion contextualizes a learning process focused on the development of both crafting and sensory skills (Appendix II.4):



<i>Muhto mun lean šaddan ieš oahppas guorrut. Go mu eadni ii lean diekkar gii mahtii oahppahit, mu duddjot. Nu ahte mun šadden ieš. Ja mus lei áhkku juste seammalagán... go mii láveime duojin álgit gápmagiin guorrut, de gal issoras mitalit ja mitalit ja mitalit “na don áiggut ja son láve no ja no ja no”.</i>	But I came to learn how to sew by myself. Because my mom wasn't someone who could teach me to duodji. So I had to do it myself. And my grandmother was just alike... when we used to duodji starting with sewing leather shoes, it was certain she was inexorably going to tell and tell “you do like this, and it goes like that, ja nu, ja nu”.

⁹⁶ Eira (Mathis) 2024.

⁹⁷ Valle 2024.

<i>Ja muhtimin mun ain in ipmir maid son lohká ja de láve ahkku lohkat “buvtte deike dan duoji gal mun ieš guorun valmas”.</i>	And sometimes I still didn’t understand what she said and then grandma used to say, “pass me the duodji here, I can finish sewing it myself”. ⁹⁸

Because in Sámi orality the «muitaleaddji never shares stories in a set form» (Finbog 2022a: 28), as much as possible, careful attention has been given to preserving each person’s unique language, tone, and individual style of storytelling.

My position as a listener and, above all, as a recordist prompted critical reflections upon the use of microphones and audiovisual documentation in the audio-anthology making; a potentially extractive activity – what Dylan Robinson effectively condenses as “hungry listening” (2020: 14) – that I sought to carefully attune to Sámi values and research practices respectful and responsible towards the Land, the people and the knowledge being shared. This led me to draft a relational and spatial methodology aimed at facilitating the transmission and collection of stories in a time-space identified as suitable, comfortable and manageable [*birget*] by the *muitaleaddjit*; an “ethical space of engagement”, as Ermine (2007) terms it, that could bridge diverse and, at times, conflictual positionalities and knowledge transmission systems.

To gather at the fireplace,
sharing and coming together. We tend to
ourselves – our knowledges and spiritual needs –
in the same way that we tend to the fire.⁹⁹

Dollagáttis [by the fire] is a relational methodology central to the transmission of Sámi aural knowledge and, more broadly, the space where stories have traditionally been shared. During fieldwork, I explored this practice as a way to ensure respect and honor towards the ancestral tradition of storytelling, while also preserving a bioculturally safe environment for the knowledge production and transfer. The methodology is embedded in an outdoor space, specifically around a fire, where the crackling flames may inspire a *luohti*¹⁰⁰ and environmental listening can influence the storytelling, offering site-specific aural suggestions. An example of this is found in Áilu Valle’s *muitalus*, which precisely opens as an invitation to listen-with surrounding other-than-human sounds as integral part of a multi-vocal narration:

⁹⁸ Eira (Kristine) 2024.

⁹⁹ Finbog 2022a: 27.

¹⁰⁰ Mathis Eira, Oral teaching (personal communication), June 20, 2023, Guovdageaidnu.



*Mun lean juste dál ge guldaleamen, Right now, I am listening.
mun guldalan dien Junttejoga ahte I am listening to this Juutuan river,
maid, maid dat muitala. and also to what it's telling me.*

[...] [...]

*Gal mun diená smiehtan smiehtan I'm reflecting on all these nature
buot daid luonddu jienaid de dieđusge sounds, and of course the sound of the
juste dan čázi jiena dat rávdnji, gorži, water, the current, the waterfall. It's
mii dal de deaivá dat lea okta hui, hui something that resonates deeply,
dakkár mii lea something close to the heart – that is,
váimmu láhka ja dieđusge lea of course, due to growing up here, a
bajásšaddan mánnávuodaruovttus place that was a childhood home, on
ge diená jávregáttis. the banks of the lake.¹⁰¹*

While *dollagáttis* refers to a specific site and an equally distinct listening posture based on mutual attention, in *Muitalusat guldaleami birra* this concept has been extended into a broader methodology, adaptable to each storyteller's unique sharing environment. It becomes an allegorical “fireplace” that accommodates various taskscapes and situational spaces, ensuring that the story is not forcibly alienated from the space where the respective knowledge is originally produced or transmitted. Like the space of transmission around the fire, this approach fosters an organic interaction between the narrator, the narrative and their relevant surrounding echosystem. In addition to spatiality, this approach values and encourages the natural temporality of listening-with the relevant echosystem, where stories and the subjectivities they recall can mutually inspire and engage in dialogue across the sonosphere. This occurs at the expense of the pursuit of an acoustically controlled environment traditionally encouraged in academic recording practices. A fitting example is Ellen-Johanne Kvalsvik's *muitalus*, which recording opens with the sharp squawking of seabirds as a result of the *muitaleaddji*'s wish to share her history of listening surrounded by the voices primarily evoked by her memory (Appendix II.6).



In the background, we can hear the kittiwakes and the seagulls. And that's birds that I remember from my homeplace, where I grew up, on an island, a bit out in the sea... Where the seascape is dominating, with the sounds of the ocean, sounds of different birds, seabirds.¹⁰²

¹⁰¹ Valle 2024.

¹⁰² Kvalsvik 2024.

Similarly, Kristine Eira's *muitalus* was collected within a domestic echosystem, unfolding around the sounds of her *duddjot* [crafting] in the precise space of her workshop – a setting she chose because it regularly inspires her storying and allows me to «see [her] work with the materials while [she] talk[s] about the sounds each of them makes» (Appendix II.4).¹⁰³ By making these sounds manifest alongside her storytelling, Kristine highlights how both the faint and loud sounds of *duodji* often go unnoticed, despite carrying therapeutic values and acting as rich and treasured repositories of material know-how.



*Go mun čeahkkan ja guorrun ja gulan
guorranmašiidna jietna, de le munnje
dego terapia.*

*[...] Ja de čeahkkat dan mašiidna
ovttabealde ja gullá dan mašiin-
jeatna go manná “drrrrr”... Manná
nie mašiidna. Ja da dego luoitá visut
jurdagit guorodis, dat čuovvu dušše
dan mielde. Dat lea dego rávdni mii
manná, ja čuovvu ja čuovvu ja
čuovvu.*

*Nu ahte duodji lea iešguđet jienat. Da
lea mašiin-jietna, dat lea vahččan-
jietna, dat lea neaskin-jietna, dat lea
suotnárpu-jietna. Dat lea sistedikšun-
jietna. Dat lea salten-jietna. Dat lea
vuoitás-jietna go vuoiddan gapmasat
dege sisti bijat ja vuoiddat.
Nu ahte da leat ollu jienat ja go gávtti
olmmoš guorrut, dat leat
jienat mot don bijat báddii
bohtalagat.*

*Dat leat jienat. Iešguđelagan
jienat.*

*Nu ahte juohke ain dan duojs lea
jiena. Da ii gávdno duodji mas ii lea
jiena. Nu ahte
mii doaivut ahte jietna lea dušše da
maid gullá dego bieggá, ahte jietna
lea dušše mearra-bárut, musihkka,
iešguđelagán diekkar čoajuhus-
jienasat. Mii doaivut dat leat jienaid.
Muhto jietna lea juohke dingas.*

And when I sit and sew, and I hear the sound of the sewing-machine... to me, it is like therapy.

[...] You sit behind the machine and hear hear the sound that goes like “drrr”, “drrrrrr”... It goes like that, the machine. And it is like as if it lets all the thoughts out of your body, they just follow the sound. It is like a current which goes, and follows and follows and follows

So, *duodji* has different kinds of sounds. There is the sound of machines, sounds of cutting, sounds of tanning, the sound of the needle, the sound of curing the leather, the sound of salt... There is the sound of smearing, when I smear gámas – or rather the tanned leather. There are many sounds. And when someone sews a gákti, there are the sounds of putting bands together.

These are sounds. Different kinds of sounds.

So, everything in *duodji* has a *jietna*. You won't find *duodji* where there is no sound. So that we believe that the sound is just what we commonly hear, like the wind or just that of the ocean waves, music, and different kinds of musical-sounds. We believe those are sounds.

But the sound is in everything.¹⁰⁴

¹⁰³ Kristine Eira, Oral teaching (personal communication), August 11, 2023, Guovdageaidnu.

¹⁰⁴ Eira (Kristine) 2024.

While each *muitalus* informs the listener about the echosystemic significance of certain subjectivities and their role in Sámi biocultural history, it also invites engagement with relational ontologies and ways of listening that diverge from the dominant one – thus fostering a broader dialogue on listening-with other-than-human voices and echosystems in the broadest sense. As this last case impeccably exemplifies, the *muitalusat* in the audio-anthology draw attention to sonic experiences that may lie at the margins of dominant auralities but hold prominence within collective or more intimate acoustemologies in Sápmi. Reconnecting such peripheral or nuanced sounds to contextual storytelling in *Muitalusat guldaleami birra* represents an effort to acknowledge them as heritagizable, deserving of safeguarding and fostering, together with the knowledge they carry, under the supervision of their ancestral custodians:

We may ourselves be used to certain ways of representing knowledge or arguments, but if we take both Indigenous storytelling practices and non-human entities seriously in academic writing, we can also help to undo the injustices of intellectual colonialism. (Guttorm et al. 2021: 117)

The embrace of Indigenous storytelling in *Muitalusat guldaleami birra* posits an alternative methodology for conducting research with environmental sounds and more-than-musical practices. It calls for consultation and voicing of Indigenous epistemes – in this case, acoustemologies – advocating for biocultural and context-specific approaches to the sustainable conservation of echosystems and the transmission of pertinent knowledge. Similar to the use of art-based methods discussed earlier, the integration of Indigenous storytelling as a medium for communicating research is becoming increasingly common in ethnographic practices bridging Indigenous knowledge (Kovach 2009; Porsanger, Seurujärvi-Kari 2021).

The adoption of these methodologies proves transformative in that it provokes changes in ways of asking, forms of scholarly publication and modes of knowledge co-creation that seeks to align with alternative knowledge transmission systems and onto-epistemologies (Cook 2023; cf. Guttorm et al. 2021; Wright 2022; Kanngieser 2023). The combined use of soundscape compositions and Sámi storytelling accords a more immediate and knowledgeable restitution of the voices recorded in the field, alongside their contextual episteme. By weaving together human and other-than-human voices, this co-designed format challenges established ethnographic practices, aiming to extend research engagement beyond academic audiences. While it primarily serves as an appendix to the accompanying doctoral dissertation, *Muitalusat guldaleami birra* is also published on free streaming platforms. Despite its non-profit nature, it allows broader audiences the option to contribute financially, with any proceeds voluntarily offered to be destined in full

to the Sámiráđđi [Sámi Council].¹⁰⁵ These solutions altogether contributed to decenter my authorship, boosting community-based developments and sharing ownership and relevancy of the research. In addition to the restitution of sound material and knowledge, this audio-anthology therefore seeks to foster a more holistic return to the community that co-designed and co-created it.

Due to the broad scope of the audio-anthology, the three chapters supporting the discussion of my thesis cannot encapsulate all the stories and soundscape compositions collated in *Muitalusat guldaleami birra*. This dissertation engages with the anthology primarily as an epistemic repository, where diverse contextual experiences and ancestral wisdom converge into ways of thinking through the present, helping navigate ecosystems and more-than-musical practices (cf. Ulturgasheva, Bodenhorn 2022: 27). In the following section, I outline the structure of the dissertation, explaining the dialogical choices that led to the selection of three exemplary subjectivities from the vast corpus of narratives and sound sources in the audio-anthology.

Bohccuin¹⁰⁶

*Ja go čuvvgodišgođii iđitbeallái, dat ledje ávuin
guldalit juogo biellut álge lihkkat, de dihte ja
dál dat čuožžáladdá livain, dál dat
vuolggadišgoahtá eallu. De galggai gápmagiid
iešnai bidjat juolgái ja Leahkit mátkkis.*

(Nils Sikku Lársena Nilsá in Skaltje 2005: 240)¹⁰⁷

The notion of echosystem – a playful contraction of “echo” and “ecosystem”, standing for sonic ecosystem – refers to the structural and functional unit for the ecological study of sonic relationships within a certain environment. More specifically, it has been previously coined as the set of sonic reciprocities and interactions established within a specific area between all living organisms and the abiotic factors that characterize it. The extensive exploration of this concept in the Arctic regions of continental Europe was initially the central focus of my research project, with the provisional title of this dissertation precisely being “Mapping

¹⁰⁵ The publication links to the “10 ways to support Sápmi” listed on the Sámi Council website, encouraging listeners to engage in broader support for Sápmi. These options include donating funds for initiatives dedicated to the socio-cultural, environmental, and political sustainability of Sápmi across the four settler countries: <https://www.saamicouncil.net/en/10-ways-to-support-sapmi>

¹⁰⁶ “With the reindeer”

¹⁰⁷ “And when it began to brighten where the sun rises, you waited with joy for the sound of the reindeer bells, for then you knew the reindeer had started moving after the rest and were beginning to wander away. That's when you quickly put on your shoes and set off”

Sápmi Ecosystems”. From the initial project to the final outcome of this research, the starting point was the study of Sámi acoustemologies and *juoiggus* as a more-than-musical practice that connects people, environments, place and time. The former objective, however, was to qualitatively map all the ecosystems attested in Sápmi geography and history. By tracing the geographical, historical, ecological, societal and spiritual coordinates of sonic subjectivities dialogically selected with Indigenous fieldwork collaborators, the map would have ultimately aimed to recognize the ecosystems of Arctic Europe as heritagizable and monitorable objects.

From September 2022 to August 2023, I conducted almost uninterrupted fieldwork above the Arctic Circle, on Sámi Indigenous lands. I was based on the Norwegian side of Sápmi, specifically in Guovdageaidnu (Kautokeino), a small Sámi town located in the heart of Finnmark County, often regarded as the cultural and geographical center of Sápmi. Over the course of the year, I had the opportunity to visit all parts of Sápmi except the Russian side, due to obvious geopolitical constraints. Nevertheless, during my time in Guovdageaidnu, I was fortunate to share the roof with two Kildin Sámi students from the Kola Peninsula, who almost daily shared with me anecdotes and valuable insights into the ecosystems of the Russian side of Sápmi.

In 2019, during my first ethnographic fieldwork in Sápmi, I made a brief stop in the town of Guovdageaidnu. Although it was only a stopover between Vuohčču (Vuotso) and Máze (Masi) – where I had planned introductory meetings with those who would later become my mentors and collaborators – I took the opportunity to visit the local Sámi museum. However, during both my Bachelor’s and Master’s research, I did not cultivate any connections with informants residing in that particular town. When I began outlining my doctoral fieldwork with friends and informants from other regions of Sápmi, I was often met with the same question: “Orutgo don Guovdageainnus?! Why?!”¹⁰⁸ Why, out of all the places in a land as vast as my home country, had I chosen Guovdageaidnu?

Guovdageaidnu (69°N) is the first village and municipality encountered when heading north on the E45 after crossing the border between Norway and Finland. The nearest settlements are Eanodat (Enontekiö) 80 km south in Finland, Máze (Masi) and Áltá (Alta), respectively 70 and 120 km north – the latter being on the coast past the canyon of the Áltáeatnu (Alta-Kautokeino River) –, and Kárášjohka (Karasjok) 130 km north-east. In between these villages, the *duoddarat* (sing. *duottar*), delicate hills that define Sápmi inland’s landscape, stretch for miles among streams and lakes. The nearest active airport is in Áltá, while the railway ends in Áhkanjárga (Narvik) with the closest train stations being Giron (Kiruna) 320 km south in Sweden, and Roavenjárga (Rovaniemi) 370 km south in Finland, precisely on the Arctic Circle. There are no bus connections heading south, but

¹⁰⁸ “You live in Guovdageaidnu?! Why?!”

nearly every morning a bus links Guovdageaidnu to Áltá. A bus also connects to Kárášjohka, with a transfer at the isolated Gievdneguoika bridge.

Being a town where the primary livelihood is based on reindeer herding, Guovdageaidnu sees nearly every family owning at least one car and several other means of transportation, necessary to cover great distances at any time of the polar year. It becomes apparent that mobility in this region, and generally in Sápmi, poses considerable challenges without access to a car, a snowmobile or a four-wheeler – especially if in need to carry a lot equipment around the tundra. Even with a car, in the winter season the canyon on the road to Áltá and the route to Kárášjohka may be closed to car and truck traffic if the weather is too severe, requiring the aid of snowmobiles and special transports. Although the connections have notably improved, the historical inaccessibility of this place was already assessed by Giuseppe Acerbi:

Till our arrival, the village of Kautokeino was considered as wholly insulated in the summer season, and inaccessible to travellers. The surrounding district is described in the Danish book of geography as a country consisting of mountains, separated from each other by dangerous and impassable morasses. (Acerbi 1802b: 69)

Despite once being a common destination for travelers seeking a “sense of the exotic” in their expeditions to the North Cape (Acerbi 1802b; Mantegazza 1881; Sommer 1887), Guovdageaidnu today is not a prominent destination for both cultural and eco-tourism – at least not to the same extent as other Sámi settlements in the surrounding areas, such as Romsa (Tromsø), Áltá, and Kárášjohka in Norway, or Anár (Inari), Gilbbesjávri (Kilpisjärvi), and Levi in Finland. This can be primarily attributed to its more challenging accessibility and a relative absence of tourist-specific infrastructure or professional activities. However, during the summer months, Guovdageaidnu becomes a transit point and stop-over for travelers and cyclists heading to North Cape along the E45 route. Considering all these factors, it becomes evident that Guovdageaidnu is not only a challenging entry point to Sápmi territories but also to Sámi culture – especially for those without direct social connections to the town. While this is even more pronounced for non-Sámi outsiders like myself, I continued to receive the same question from Sámi artists and researchers coming from different parts of Sápmi, who also perceived prolonged stays in Guovdageaidnu to be quite a demanding experience: “You live in Guovdageaidnu?! Why?!”

When I began planning my doctoral fieldwork in 2021, I recognized the importance of establishing a “base camp” in a central location connecting all regions of Sápmi. I also considered the importance of learning the language and putting it into practice,¹⁰⁹ as well as being in a place where I could actively participate in bio-

¹⁰⁹ The primary reason that led me to select Guovdageaidnu over other locations was the presence of the Sámi University of Applied Sciences (Allaskuvla, the only Indigenous-led University in the

culturally significant gatherings – away from the centers of overwhelming mass tourism. Additionally, with regards to the sonic data collection, I sought a location that would provide access to a variety of Arctic ecosystems and landscapes while minimizing the impact of noise pollution, a factor that might not be readily met elsewhere and that I critically addressed in relation to my recording practice. With the assistance of long-term rental vehicles to navigate the challenges posed by scarce public transports and long distances in the area, Guovdageaidnu proved to be a strategic location in proximity to the borders of all the three accessible countries encompassing Sámi lands (Figure 20). While Guovdageaidnu is located in the middle of the tundra, it is also equidistant from nearly every other type of Fennoscandian ecosystem: the taiga, or Boreal forest ecosystem, was accessible already in Kárášjohka, Áltá and Eanodat; Arctic ocean and coastal ecosystems are mainly encountered further north-east, in Várnjårga (Varanger peninsula) but they also characterize the long shores of the nearby fjords in Áltá and Porsáŋggu; wide fjords like the mentioned ones are also defined by Arctic tidal flats ecosystems – on the sea level – and Alpine tundra ecosystems – up in the steep mountains; freshwater environments, such as rivers and lakes, are abundant across the region, and the Guovdageaidnu area is particularly rich in these ecosystems. Guovdageaidnu also proved to be an effective location due to its position at the epicenter of both current and historical environmental struggles concerning Sámi land rights, including areas such as Máze, Stilla, Riehppovuotna, Ohcejohka and Deatnu, Giron, and Jiellevárri. Residing in this area offered a unique occasion to connect with people and memories associated with these conflicts but also provided the opportunity to record and assess potential changes in ecosystems resulting from the colonial transformation of the land. In spite of this, being based in Guovdageaidnu also presented certain limitations. For instance, when protests against the Fovsen wind park took place in Oslo in early March 2023, I could not

world) and the opportunity to study and practice the North Sámi language daily. I participated in an introductory course and studied and practiced through the textbooks used in the main language courses (SAAL-1 and SAAL-2) at the same institution. While I cannot claim fluency in North Sámi, I challenged myself in July and August by conducting conversations and dialogic recordings of *Muitalusat* using the Indigenous language. This choice led to greater engagement and more in-depth conversations thanks to the ricorrere to local terminologies and concepts. Lastly, learning the North Sámi language opened up the opportunity to access a vast number of sources about joik that are written exclusively in that language and are often overlooked by non-Sámi researchers. Guovdageaidnu is the ideal place for learning and practicing the North Sámi language. The dialect and pronunciation of Guovdageaidnu have been adopted as standards for the North Sámi language, making it a valuable skill for careers in journalism, research, education, and the arts. Sámi students from all over Sápmi and from Nordic cities in the south move there every year to participate in the SAAL-1 and SAAL-2 courses, as well as to use the language in daily, practical situations outside of school. The environment of the Sámi University also facilitated important connections with Sámi professors and researchers who contributed to my research to varying degrees. I applied for access to the Sámi University library and the Sámi archives, both of which are located in the main building. During the weeks when Guovdageaidnu was sparsely populated (due to the reasons mentioned earlier) or when the weather was too severe to conduct field recordings, Allaskuvla provided a space to advance the research through books, audiovisual materials, and as a meeting place with other Sámi scholars and artists.

help but feel that it might have been easier residing in a bigger and more connected city like Tromsø or Rovaniemi.

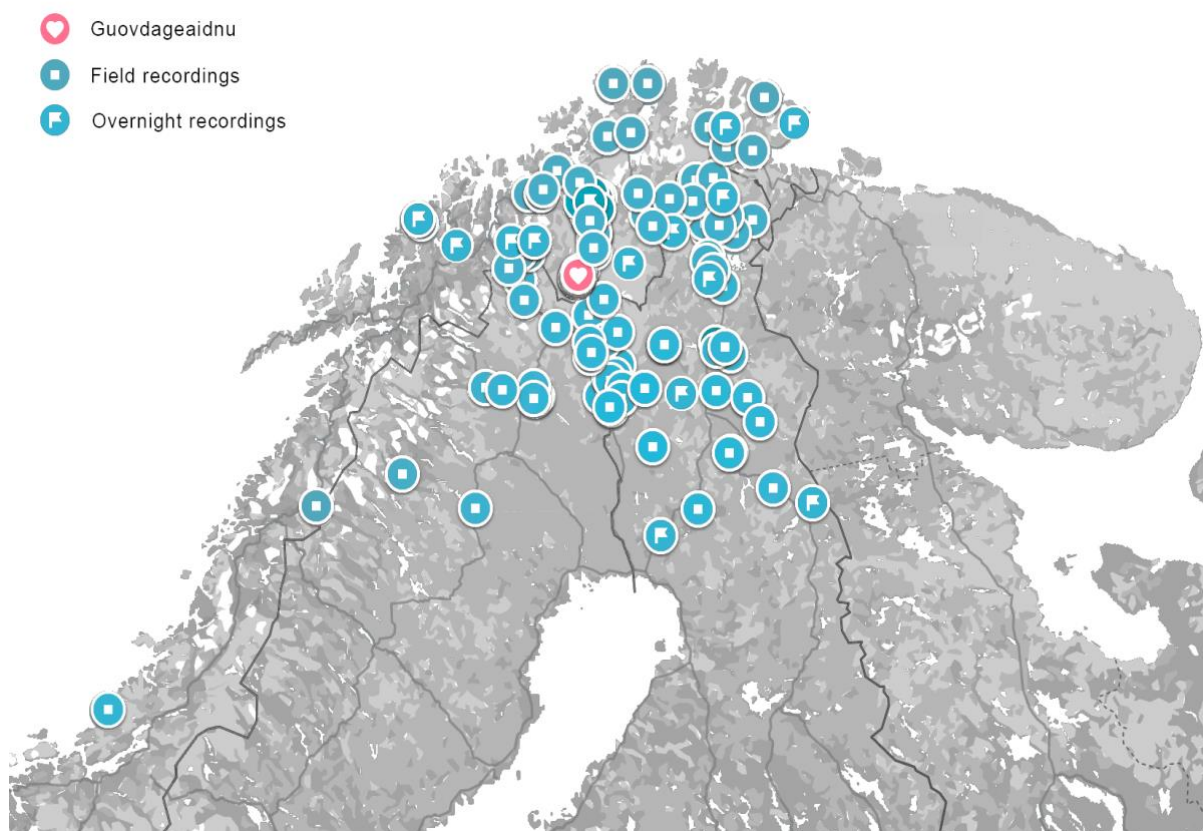


Figure 20 Map of all the field recording sites from the 2022/2023 fieldwork.

After the intense year of fieldwork, as I began cataloging the vast collection of materials, I identified over 1,000 lossless audio files, most recorded at 32-bit resolution with sample rates ranging from 48 to 192 kHz. Throughout the year, I gathered 24-hour recordings in the Guovdageaidnu area, as well as numerous overnight recordings (>8 hours), along with dawn and dusk choruses, in various Arctic ecosystems. Most of the audio files exceed 30 minutes in length, as I prioritized capturing integral soundscapes over shorter recordings that targeted specific sound sources. This quantitative approach was designed to allow for a comprehensive analysis of the ecosystemic relationships between various sound sources and their space-time context. However, as the fieldwork concluded and I reflected on how to structure this dissertation from the immense amount and diverse range of materials collected, it became clear that the original goal of mapping ecosystems across Sápmi would be unrealistic. A shift in trajectory was necessary, leading to the selection of a few, or perhaps even a single, exemplary case of ecosystem. This adjustment was crucial not only to align with the timeframe and dimension of a doctoral project but also to ensure that each of the selected sonic subjectivities received the depth and attention they deserved. Various solutions were considered and discussed with both my academic advisors and the Sámi

mentor of this dissertation, Johan Sara Jr. One approach, in particular, managed to meet both the initial goal of mapping sonic relationships within an echosystem and the revised objective of providing enough space for a few exemplary sonic subjectivities to recount themselves and their relationships with one another, while also honoring the Sámi stories shared in the audio-anthology.

This is an echosystem not rooted in a single place or time but one defined by mobility and change (*rievddadus*), shifting shape with the cycle of seasons and across the vastness of Sápmi. It is the echosystem that moves “with the reindeer” (*bohccuin*). Due to its spatial and temporal breadth, not all the sonic agents interacting within this echosystem could be equally interrogated for the scope of this thesis. Sounds of predation, of competition and of consumption, for instance, are only briefly sketched to allow space for three main *jienat* [voices] that engage in varying degrees of symbiotic interaction with the *rangifer*. Coincidentally, and perhaps a bit romantically, these *jienat* are also the keynote sounds that characterize the echosystem of the Guovdageaidnu area, as highlighted by the Municipality on their website in the section “Ovdamunit fárremis Guovdageidnui” [Advantages of moving to Kautokeino]:

Dábáleamos jienat Guovdageainnus leat beanaciellan, oktonas *scooter* jikŋon eano nalde ja *biegga* mii njurgu viessočiegaid birra dálvet, dahje *čuoika* ja *jaskatvuohka* geasset.¹¹⁰

Scooter (snowmobile), *biegga* (wind) and *čuoika* (mosquito) represent the three subjectivities interrogated about the ecological and more-than-musical qualities of an echosystem. As this dissertation aims to demonstrate, these subjectivities and their respective voices are deeply interconnected with the movement of the reindeer and between each other. Particularly, what these sonic agents share is their vital role in driving and sustaining the movement of the herds through different times and spaces of the Arctic, keeping the echosystem in motion and in balance. These subjectivities also serve as exemplary cases, each in its own way critical and, to varying extents, controversial in terms of musical agency to dominant ways of listening. All draw attention to ontological and acoustemological conflicts, which each chapter of this thesis seeks to address by examining the intersections between Sámi ancestral and adapted knowledge and dominant onto-epistemologies grounded in long-standing nature-culture divides.

Vuosttaš jietna [the first voice] is that of *biegga* – the wind. This first chapter presents a tentative history of listening with the wind in Arctic Europe. The discussion revolves around two declinations of the North Sámi term *bieggafápmu*, [wind power], each reflecting diverging ontologies of the wind as a powerful force:

¹¹⁰ “The most common sounds in Guovdageaidnu are the dogs barking, a lonely *scooter* frozen under the ground and the *wind* that blows around the houses in winter, or *mosquito* and *silence* in summer” (<https://www.guovdageainnu.suohkan.no/politihkka-ja-halddahus/suohkana-birra/ovdamunit-farremis-guovdageidnui/>) [my emphasis]

on one hand, as a sentient being that animates the Land, and on the other, as an objectified source of energy to be extracted from the Land. The chapter delves into Sámi landscape practices linked to reindeer herding, where the voice of the wind drives the reindeer and ensures their direction along seasonal trails – to the extent that the reindeer is seen as an asset of the wind before belonging to the herders themselves. Conversely, the power of the wind has recently emerged as the focus of an industry that, from a contested framework of colonial economies, views this atmospheric force as a sustainable energy source to be extracted and used. By bringing together both established and more recent *biegga luodit*, the wind is consulted throughout the chapter as a *juoiggalmas* and as *juoigi*. This more-than-musical exploration of *biegga* opens up a discussion on the complexities of engaging with an abiotic (geophonic) phenomenon as a sentient being – endowed not only with vocal agency but also revered as an other-than-human bearer and custodian of the bioculturally shared heritage of *juoiggus*. Finally, the chapter addresses the wind’s more-than-musical agency in transmitting values, affects and concerns in the face of subtle cases of green colonialism, where *juoiggus* safeguards and reinforces endangered echosystemic relationships between wind, reindeer and people in times of social and environmental crises.

Nubbi jietna [the second voice] is that of mosquitoes, *čuoikkat*. This second chapter unfolds as a trial against this tiny, infamous insect, whose ubiquitous presence is a constant in the lives of both people and animals throughout the Arctic summer. The mosquito stands trial for its existence, charged by dominant ontologies with being an “insignificant pest”, a “natural enemy” and an “unbearable nuisance”. The chapter opens with the testimonies of the “prosecutors”, informed by four written accounts from travelers who, between the 17th and the 20th century, traversed the Arctic regions of Europe during the summer season. These accounts present diverse histories of listening *to* the mosquito, but they uniformly mirror a dominant acoustemology that, over millennia, has fossilized the buzzing of this insect as one of the few most undesirable sounds produced in nature. In defense of the mosquito, four Sámi “advocates” provide counter-testimonies informed by histories of listening *with* the mosquito. Through distinct, multi-modal stories, the advocates not only advance an ecological understanding of the mosquito as central to the balance of the Arctic echosystem – chiefly in driving herds towards highland pastures – but also an acoustemology that challenges hegemonic auralities. The consultation of the mosquito as both *juoiggalmas* and *juoigi* raises the provocative question “how musical is mosquito?” – while the more-than-musical value of its voice reframes this insect as kin rather than foe within local echosystems, overturning the three major charges advanced by the prosecutors. Lastly, the more-than-musical study of mosquitoes and their ecological role in the Arctic emphasize how the voice of such a *radical* other-than-human being can inspire a paradigm shift across disciplines, providing affective, ethical and sustainable alternatives to understanding and acknowledging voices beyond the human.

Goalmmát jietna [the third voice] is that of *mohtorgielká*, the snowmobile. In this third and concluding chapter, the snowmobile is presented as a relatively recent introduction to the reindeer herding echosystem. Although its adoption was quickly recognized as an efficient modernization – remaining true, to a certain degree, to the traditional ways (much like the mosquito, the humming sound of the snowmobile directs the reindeer in the desired direction) – the transformation of the echosystem has elicited largely divergent opinions on this *jietna*. In some instances, this sound provides a droning accompaniment particularly suited to encourage *juoiggus*, while in others, it is perceived as a *luohti* itself or entered the repertoires of numerous *juoigit* as a novel *juoiggalmas*. On the other hand, however, there are also accounts of the snowmobile being a too loud source, masking certain environmental sounds that hold ancestral values, thus causing a loss of “harmony” in the echosystem. However, the chapter soon reveals how oversnow and all-terrain vehicles rather serve in this thesis as a sonic allegory, leading to a broader discussion on soundscape conservation practices, as well as aesthetics and ecologies of silence. The contents are gathered in a parallel plot of histories of listening from Indigenous and non-Indigenous stakeholders, from which distinct narratives of silence emerge. On one hand, silence is either presented as a hallmark of pristine, untouched nature, or a romanticized desert – both natural and cultural – echoing colonial ideologies of *Terra nullius*. On the other hand, among the Sámi, silence is also recognized as a distinctive feature of the Land, but rather as a state where even the faintest of sounds emerges loud and meaningful. In fact, the Sámi concept of silence (*jaskatvuohhta*) more accurately denotes a sense of quietude rather than the absence of sound. The introduction of *mohtorgielká* disrupts this silence, as the chapter critically interrogates the responses of both Sámi and settler audiences to this loud anthropic sound source. Whether or not, paraphrasing Schafer, the sound of snowmobiles destroys a mystified “idea of North” (Schafer 1977: 21), it is crucial to recognize how the same sound is also valued as pleasant or even homely by Indigenous peoples who have fully integrated them into their traditional livelihoods. Once again, as *juoigi* and *juoiggalmas*, the voice of *mohtorgielká* is consulted from the perspective of Sámi acoustemologies, challenging the sonic colonialities inherent in top-down approaches to ecoacoustic conservation, and tracing the sonic reciprocities matured among people, reindeer and other Earth beings of the tundra.

Each chapter opens with a personal story centered on the act of recording or listening with the relevant subjectivity. These anecdotes are drawn from my field diaries and recording notes. Their more discursive and intimate nature serves to position myself in relation to the subjectivities I engage with and, hopefully, to bring to the reader’s attention the acoustemology from which I listen and write – bridging familiarized Indigenous sonic knowledge with my non-Indigenous academic (ethnomusicological) and artistic background.

BIEGGA



On top of the Havøygavlen promontory

Ávvá, Ávanuorri

April 29, 2023, 20.15

Fortunately yesterday, as soon as I arrived in Ávanuorri, I rushed to record Turbine No. 9 (T9) – when only light breeze swept through during the session, before swelling later in the evening [Figure 10]. I just finished listening back to the recordings a couple of hours ago and I can say I am very pleased with the results. Enthusiastic from yesterday's work, I decided to visit the summit of Ávvá today, fully aware that the wind was far too violent for decent recordings. So I took this hike more for leisure, leaving my microphones at home for once, in order to listen with the landscape itself, without the mediation of equipment or concerns over recording outcomes. I knew I would only encounter the wind's "evil side" – to use field recordist Gordon Hempton's words [2016:18] – that is its inevitable capacity to saturate my microphones at every moment. But perhaps Ánde Somby would have something to say about that analogy, he who has made this saturation into a brilliant duet. While yesterday I stopped at the first turbine on the ascent up the promontory, today I hiked further and took in the web of access roads that, leading to each turbine in what is the world's northernmost wind farm, fragmented the landscape into an irregular mosaic.

And there was Turbine No. 1 (T1), the most distant from the town, positioned at the edge of the promontory's cliff, imposing itself symbolically over both the ocean in front and the land behind. Perhaps precisely for this symbolic position, T1 had been given a "special treatment" by some creative visitor who left their mark in the form of graffiti – adding, at the very least, a bit of color to these towering ivory columns, with their 80-meter hub heights and rotors equally vast in diameter. The wind had picked up even more forcefully, and I found myself wrestling with gusts easily surpassing 60 km/h. But something felt off. My steps became unsteady, as I struggled to counter the gusts, feeling increasingly unbalanced. This unnerved me, given the altitude and proximity to the cliff. So I sought the closest shelter, a prominent landmark made of stones piled atop one another, where I crouched down, shielding myself from the gales. It was then that I realized the cause of my loss of balance. My hearing was compromised, saturated by the turbine's rapid whooshing and slicing through the air above me, which deafened me to the actual wind, making it impossible to pick its direction and adjust its force. In that instant of *schizophonia*, as Schafer might have called it, my brain struggled to discern the source and direction of the sounds I was hearing and maintain a proper spatial orientation and equilibrium. Once realized the illusion, in that the "artificial wind" produced by the turbine was interfering with my perception of the real wind, I made my way back to the car, wrestling once more with that extraordinary force. But I wondered, if it had this powerful an effect on me, knowing exactly what the turbine is and its purpose there, what could other unsuspecting beings with even more attentive hearing experience of it?

To the ear, *biegga* [the wind] reveals *eallima jienaid* [the voices of life]. It caresses *Eana* and all the organisms that dwell upon her, making them resonate and breathe together, thus animating them.¹¹¹ As it whispers through forests, valleys and fjords, the wind infuses vital energy and gives voice to all the morphologies of Sápmi, which in turn shape the timbre and sonic qualities of *biegga*, making its acoustic presence tangible.¹¹² In organological terms, the sound of the wind is appreciable only in relation to the nature of the surfaces it interacts with. It excites and sets in vibration lands and waters in diverse ways, depending on variables such as its velocity, direction, quality and morphology of the materials it passes through – which specify the wind’s remarkable «number of vocal variations» (Schafer 1977 [1994]: 22; see also Skaltje 2005: 57; Äikäs 2015: 114; Kvalsvik 2019: 43; Renzi 2023b: 169) (listen to ‘Biegga’, track no. 3 in *Muitalusat guldaleami birra*). *Biegga* is perhaps the keynote sound of Sápmi.¹¹³ Not only is the wind the most frequently encountered atmospheric agent in Sámi oral history and ecological knowledge. Its ubiquity in the region’s space-time – compared to the seasonal transitivity of other environmental actors – is corroborated by the copious recurrence of windy sonic events in the accounts of travelers and missionaries whose writings have reached us from the European Arctic (Negri 1700; Acerbi 1802b; Mantegazza 1881; Sommier 1887; Loschi 1935). Contingently to diverse intensities, the wind’s voice ranges from a ‘sweet whistling’ to ‘raging bellowing’, (Sommier 1887: 27, 32, 39), though its omnipresence grows so monotonous that «assopisce moralmente e fisicamente, e ce ne stiamo sonnolenti»¹¹⁴ (ibid: 109). Ironically, apart from this sense of monotony, an even major source of discouragement determined by the wind was experienced by the travelers when *biegga* was particularly and unexpectedly tempestuous: «[w]e left this cabin to pursue our voyage; but after proceeding five or six English miles, we were obliged by the wind again to land» (Acerbi 1802b: 107).

Within this travel literature, instructed by a dominant ontology built on the sharp separation of nature and culture, the voice of the wind has been largely objectified as an inherently natural sound – a mere product of an abiotic condition of the environment which, at best, inspires poetic tones/metaphoric language in

¹¹¹ In this sense, the qualities of the wind can be symbolically linked to the Greek etymology of this entity, *ἄνεμος* (*ánemos*), derived from the Proto-Indo-European verb meaning “to breathe”.

¹¹² As Calanchi points out, «[s]ounds, when moving through an environment, are influenced by it in terms of reverberation and attenuation, leading to different responses in their biological perception» (2015: 34; see also Äikäs 2015: 114).

¹¹³ To support research conducted for my Master’s thesis (Renzi 2021a), I designed a survey titled “What does it sound like Sápmi?” and distributed via various digital media in June 2021 to the research participants and a broader sample of Sámi respondents from different parts of Sápmi. This approach made it possible to identify a relatively narrow selection of sound sources and events deemed most significant by the Sámi for their sense of belonging to the land and indigeneity. The results reveal *biegga* as the singular entity that received the highest appreciation. Similar observations of wind as a keynote sound of Sápmi are found in Äikäs (2015: 115) and Kvalsvik (2019: 78).

¹¹⁴ “lulls both body and soul, and we find ourselves wearied of it”

writing but ultimately falls short of a genuine recognition of any skills or agency. This is particularly notable in the account of Giuseppe Acerbi, whose dual sensitivity as a naturalist and composer distinctively surfaces throughout the vast written description of environmental sounds and *juoiggus*. While he promptly dismissed the latter of any musical value, the Italian traveler offers what is likely the closest a foreigner's travelogue has come to acknowledging proper agency to the wind as a musical actor:

Artificial music appears to be wholly banished from those forlorn and solitary districts. The only musical accents to be heard in Lapland are those which nature has indiscriminately bestowed on all other countries, without any regard to man, whose pride induces him to believe that everything in the world is made for him alone. The only melody to be heard in Lapland is that with which the birds make the woods re-echo; that of the rivulets rustling over their pebbly beds; that of the winds resounding amidst the branches of trees and the deep gloom of forests; and lastly, that of the majestic fall of rivers over rugged rocks, where the waters break with a crashing noise, and fend up their foam to the clouds. But that I may not leave my reader altogether without an idea of Laplandish singing, such as it is, or rather of the vociferation of the wandering Laplanders. (Acerbi 1802b: 67).

It is curious how, despite his ethnocentric biases that render him deaf to any human-made music not conforming to the rules of an “erudite Western harmony”, Acerbi criticizes the (generalized) human tendency to believe that the world and its phenomena, including music, revolve solely around human perceptions. In this subtle anthropocentric critique of anthropocentrism, Acerbi's sensitivity to musical qualities in the environment unintentionally uncovers a posture of listening that resonates with Sámi acoustemologies and more-than-musical values. In fact, from a biocultural perspective rooted in local ways-of-listening, the Sámi recognize in *biegga* a more-than-musical agency, regarding the wind not only as a bearer of the *juoiggus* heritage but also one of the most skilled *juoigit*, alongside other human and other-than-human companions.

This chapter presents a tentative history of listening-with the wind in the European Arctic region. The discussion revolves around two declinations of the North Sámi term *bieggafápmu*, [wind power], each reflecting diverging ontologies of the wind as a powerful force: on one hand, as a sentient being that animates the Land, and on the other, as an objectified source of energy to be extracted from the Land. The chapter delves into Sámi landscape practices linked to reindeer herding, where the voice of the wind drives the reindeer and ensures their direction along seasonal trails – to the extent that the reindeer is seen as an asset of the wind before belonging to the herders themselves (section ‘Biegga luondu’). Conversely, the power of the wind has recently emerged as the focus of an industry that, from a contested framework of colonial economies, views this atmospheric force as a sustainable energy source to be extracted and used (section ‘Biegga millut’). By bringing together both established and more recent *biegga luodit*, the wind is

consulted throughout the chapter as a *juoiggalmas* and as *juoigi* (section ‘Biegga juoiggaha’). This more-than-musical exploration of *biegga* opens up a discussion on the complexities of engaging with an abiotic (geophonic) phenomenon as a sentient being – endowed not only with vocal agency but also revered as an other-than-human bearer and custodian of the bioculturally shared heritage of *juoiggus* (section ‘Biegga juoigá’). Finally, the chapter addresses the wind’s more-than-musical agency in transmitting values, affects and concerns in the face of subtle cases of green colonialism, where *juoiggus* safeguards and reinforces endangered echosystemic relationships between wind, reindeer and people in times of social and environmental crises (section ‘Biegga vilba’).

Bieggafápmu¹¹⁵

Similarly to other Indigenous frameworks, in Sápmi the connections between ecologies of sound and ecologies of music are affirmed and primarily evident in cosmogonic myths (Grim 2001: 53; ho‘omanawanui 2014: 145; Livermore 2016: 60; Levin 2006: 169-170; see also Schafer 1977: 21; Colimberti 2004: XXIII). Among the oral narratives passed down since time immemorial, the *muitalus* of Vaja (female reindeer) is particularly rich in sonic elements (Finbog 2022a). According to this story, the first physical experience of the world occurred through the sense hearing. It was the wind, with its murmur, that originally transmitted life, carrying memories, messages and emotions to the ears of every *ealli* (cf. Gaski 2019: 4; Finbog 2022a: 28). However, much of Sámi orality also caution about the wind as a powerful and potentially destructive force, capable of “sweeping away life just as it erases ski tracks on the white *duoddarat*” (Utsi, Utsi 1980; Skaltje 2005).¹¹⁶ This giving-taking ambivalence is characteristic of the *muitalusat* centred around the great forces that shape and transform Sápmi’s environment (Stoor 2007: 131). The role of *biegga* in these oral narratives not only rationalizes the natural coexistence of continuity and change but also imparts essential knowledge about the land and all its constituents. Today, this knowledge remains foundational to strategies for inhabiting the Arctic region and learning how to navigate it with caution, agility and respect (Skaltje 2005: 58).

Biegga luondu¹¹⁷

In the Sámi belief system, the voice and activity of *biegga* are ancestrally associated with entities known as *Mánnelaččat* and with the wind god *Bieggaołmmái* (Hætta

¹¹⁵ “Power of the wind”

¹¹⁶ A reference to the poem *Min Eallin*, by Paulus Utsi: “Min eallin / lea dego láhttu / vilges duoddaris / man guoldu jávista juo guovssugeažis” [Our life / Is like a ski track / On the white open plains / The wind erases it before morning dawns]

¹¹⁷ “The nature of the wind”

1994; Miller 2007; Helander-Renvall 2010; Porsanger 2012). The first are commonly described in literature as spirits of the dead that manifest only to certain people, in certain conditions, while remaining invisible to the most (Turi 1910; DuBois 2023). Their sonic presence, however, is perceivable by everyone and it recalls the sound of the wind, as it does also the physical impact of their movement through the trees. About them, Johan Turi writes:

[...] sii girdet ilmmis dego lottit, muhtumin badjegeappot ja muhtumin vuollegeappot. Ja go dat leat golgame, de dat go leat boahtime, de dat šuvvet nu stuora vuimmiin ahte japmá dego buot garraseamos bieggá, ja velá garraset šuvva lea mánnelaččain. Ja go dat leat manname, de sii eai mana govdadit muhto gokko mannet, de dakko sojahit muoraid jur eatnamii ja dodjet muhtun muoraid. Ja go dat gullo, de dat leat mánnelaččat, muhto eai oidno datge go jur soames olbmo čalbmái. Ja vigihis luonddogáhppálagat gal oidnet ja gullet dallenai, go eai jama nu_ahte olbmot gullet. (Turi 1910: 72)¹¹⁸

On the other hand, Bieggaołmmái, also known as Bieggagállis (with *olmmái* meaning ‘man’ and *gállis* meaning ‘elder man’), is an aeolian deity believed to reach everywhere, from mountaintops down to valleys, both on land and at sea (Hætta 1994: 15; Kulonen et al. 2005: 433; see also Pulkkinen 2014).¹¹⁹ In Sámi iconography, primarily derived from the figures painted on the membranes of ceremonial drums (*goavddis*), Bieggaołmmái is depicted holding a spade in his right hand and a club in his left – tools used to ward off hostile spirits and, most importantly, to direct the winds and sweep away the rain (see chapter cover image; Manker 1938, 1950: drum no. 59; Hætta 1994: 15)¹²⁰

*Stuorra stuorra gievra,
stuorra gievra.*

¹¹⁸ “they fly through the sky like birds, sometimes up high and sometimes lower down. And when they are on the move, those that are coming, they moan with such great power that they sound louder than the harshest wind; the moaning of the mánnelaččat is greater than any wind. And as they go along, they do not go broadly, but where they go they bend trees to the ground and snap some of them with the force of their movement. And people can hear that the mánnelaččat are coming, but they cannot see them; only certain people can. And innocent animals can both hear and see them, even when they don’t make such a racket that people will hear them.” (Turi 2011: 72)

¹¹⁹ Other nomenclatures: Piögg-oumađ (Skolt) and Pii’nk-olma (Kildin); Ilmaris (Tornio). While Bieggaołmmái is historically recognized as a male deity, gendered connotations in descriptions of *biegga* do not emerge with the same clarity. In field conversations, *biegga* was often described to me using metaphors associated with feminine qualifiers (cf. Diamond 2007: 30) without ever explicitly specifying or defining its gender. Rydving has noted that some sacrificial sites were accessible only to men, including rituals associated with the wind and weather (Rydving 2006: 104). Archaeologist Tiina Äikäs counters by suggesting that such gender boundaries in ritual activity should not be categorically interpreted or seen as structurally impermeable to the extent described by Rydving. The ceremonial presence of women is frequently evidenced by material findings at sacrificial sites (Äikäs 2015: 178).

¹²⁰ To these tools, another iconographic marker often adds distinction to this figure from other deities: the traditional men headgear, *čiehgahpir*, or “Four Winds Hat,” which reinforces the significance of *biegga* within the realm of Indigenous material culture (Ånde Somby, Oral teaching (personal communication), October 20, 2022, Venice). For a more detailed description of the iconography of the *goavddis*, I refer to Manker (1950), Emsheimer (1977), Joy (2015), Renzi (2020), Prost (2022).

*Bakti, dievvá ja geadgi dusse
bissot dan ovddas.
Beahci, soahki,
oktan ruohtasiiguin fertejit veallánit.
Suhtas leai gal gullat dan juza.¹²¹*

The ambivalent nature of the wind, both as a giver and a taker, echoes in the myths surrounding Bieggaoimmái. His power to control and alter atmospheric forces makes him a divinity who is ritually consulted to ensure the success of crucial subsistence activities (Kulonen *et al.* 2005: 433; see also Pentikäinen 1995; Rydving 1995). During the ceremonies that traditionally preceded a bear hunt, the direction of the wind (*bieggahálti*) was considered a key factor to be divined by the *noaidit* (Sámi spiritual leaders) through the drumming of the *goavddis* [oracular drum] (Renzi 2020). Being aware of sudden changes in *bieggahálti* would allow the hunter to «galgá miedábeale njáhkát, vai ii oaččo hája» (Turi 1910: 49).¹²² Favorable wind patterns are also sought during the seasonal migration of the reindeer, as *biegga* leads the herd (*eallu*) across the vast tundra (see below; Kulonen *et al.* 2005: 433). However, the wind serves as an ally for Arctic predators too. The wolf «runs in front and on the windy side of the herd and releases a scent so that the reindeer smell it and that frightens the herd so that it scatters, running off in all directions. And so the wolf is able to separate some animals out from the herd and drive them apart and kill as many as it can» (Turi 1910[2011]: 46).¹²³ A similar skill is also embraced by Sámi hunters, as accounted in the travelogue of Giuseppe Acerbi in relation to the wild reindeer [*goddi*] (1802a: 79).

In order to secure the protection of Bieggaoimmái and the favorable movement of air masses, sacrificial offerings to this divinity and the related atmospheric agent are not uncommon along herding trails. Archaeological evidence has shown that the peaks of the tallest *duoddarat* – sites where the wind blows the strongest – were privileged for such propitiatory activities (Kulonen *et al.* 2005: 433; Äikäs 2015: 129). An account from Finnish folklorist Samuli Paulaharju illustrates how these wind propitiatory rituals, however, were not exclusive to reindeer herding but were also performed in relation to other landscape practices:

Kun kalamies taas meni padolleen, niin kova tuulenpuska paiskasi
veneen kumoon, ja ukko oli vähällä hukkoa. Peloissaan kääpersi

¹²¹ “Great, great and strong / Great and strong / only the cliff, the mound and the rock / stay still in front of it / The pine, the birch / with their roots they have to lie down / Pleasant was to hear that murmuring”. This is the *dajahus* of “Bieg’gagállis” transcribed in Jernsletten, Jåks (1976: 15) with the original spelling: “Stuorra stuorra giev’ra, / Stuorra giev’ra. / Bák’ti, dievvá ja gæd’gi dušše / bissut dan ávdas. / Bæcci, soakki, / åk’tan ruot’tasiiguin fer’tejit vællánit”.

¹²² “sneak up on the downwind side, so that [the bear] won’t catch the scent” (Turi 2011: 70).

¹²³ The original passage in Turi reads: «[...] de ruohtta vuostabeallái ealu ja luoitá dakkár hája, ahte bohccot hakset ja ballájit dušše hájas, ja de álget ruohtadit juohke guvlui. Ja de beassá návdi botket soames čiega ealus ja doalvu ja goddá nu olu go fal háhppeha» (1910: 29). This information was additionally confirmed by Ante Aikio, Oral teaching (personal communication), August 13, 2019, Levi.

kalamies kiven luo pyytämään, ettei se enää olisi vihainen (Paulaharju 1932: 24).¹²⁴

Several *sieiddit* sacrificial sites are today identifiable through the study and acknowledgment of Sámi toponymy, which preserves clear linguistic references to the wind or its influence on the local environment (e.g., “Bieggavárri”, “Piegg-oaivadz”; see Carpelan 2003: 80; Kulonen et al. 2005: 433; Äikäs 2015: 21; Ligi 2016: 158; Ainiala, Saarikivi 2017: 108). Indigenous toponymy has significantly contributed and continues to play a crucial role in the transmission of biocultural knowledge and sense of place among the Sámi (Cogos et al. 2017). However, the portion of ecological knowledge related to the acoustic experience of *biegga* becomes especially prominent and pedagogically valuable during gatherings where families come together within a specific taskscape, such as reindeer earmarking, fishing, berry-picking or *duddjot*. In occasion of these communal and trans-generational interactions, families share and transmit – both orally and through action – knowledge, skills and experiences related to the spatial, temporal and social dimensions of the landscape (Skaltje 2005; cf. Ingold 1993; Joks et al. 2020). This knowledge emerges from a network of life stories and specialized tasks that weave together memories and narratives with multisensory perceptions of the Land, where the direction and intensity of the wind play a central role. As Báluha Biette Biret Márjá recalls in a story shared with Maj-Lis Skaltje:

Eidde buoremus guoimmit, Márjá ja Elle, dat leigga hui čeahpit lávlut. Eidde, Márjá ja Elle lávlo ollu ovttas. Dat lei akta dáhpáhus mii dáhpáhuvai vuosttas jagi go eidde čuovui Biera-ednováinni duosa Mávvassii. Elle ja Márjá nuoramus viellja Ovlá láhppui dálkin. Beana bodii ruoktut. Ja isida ohcagohte muhto eai dat gávdnan. Ja de lávii eadni lohkat ahte diet dáhpáhus lea sutnje nu nannosit báhcán jurdagii ja millii. Sii šadde nu gullešat, ceggejedje beljiid ja guldaledje juohke unnimus bieggabiškanasa mii biškkáda mange vuostá, lehkos dal soagi elege muora vuostá. Ijaid nai sii guldaledje go biekkai ja dálkkadii. Jus soaitá dan olbmo jiena gullát. Jus dat huiká soames sajis. Sii eai sáhttán nohkkat albmaládje. Vuoruid mielde guldaledje. Ja dat hárrjánejedje guldalit ilmmi goadis, daid biekkaid ja lávluid (Skaltje 2005: 58).¹²⁵

¹²⁴ “When the fisherman returned to his dam, a strong gust of wind capsized his boat, and the old man almost drowned. Frightened, the fisherman crawled over to the rock to plead that it no longer be angry”

¹²⁵ “When my uncle Biera moved north to Mavas, my mother went with them. In the first year they lived there, Elle and Marja’s youngest brother, Ovlla, disappeared in a storm. Only the dog returned home. They searched for the dog’s owner but couldn’t find him. My mother used to tell that this event left a deep mark in her memory. Everyone became very attentive to every sound, they perked their ears and listened for the slightest sound of the wind bouncing off something, a birch or a stone. Even at night, they listened to the wind and the storm. Perhaps they could hear his voice. If he called from somewhere. No one could sleep properly. They took turns listening. They learned to listen to the storm inside the tent, the wind, and its songs”.

Such knowledge remains crucial today to navigate the vastness and severity of the tundra, as well as for the coordination of herds and for other local economies upon which community subsistence depends (Ingold, Kurttila 2000):

To guide them in their route, they make observation of the quarter from whence the wind blows, and by night are directed by the stars. (Acerbi 1802b: 138)

Exposure to and deep familiarity with extreme atmospheric and environmental conditions have fostered the development of perceptual and practical skills whose extraordinary accuracy and effectiveness have historically been met with astonishment by foreign observers, eager to better understand human resilience in adverse environmental conditions (Ligi 2016: 104; cf. Kuljok, Utsi 2015; Gaski 2019).

The long-standing complicity between the Sámi and the wind is well-documented in the logs of explorers and missionaries, where it is often accompanied by terms such as “magic” and “sorcery” (Moyne 1981; see also Ligi 2016: 85-87). As early as the anonymous text *Geographia universalis*, dating back to the 13th century, the “Finns” (old exonym for “Sámi”) are described as skilled people capable of taming the winds and even “capturing” them through knots on ropes, which were traded with sailors heading north. Three centuries later, Olaus Magnus reports in his *Historia de gentibus septentrionalibus* how

[s]olebant aliquando Finni, inter caeteros gentilitatis errores, negotiatoribus in eorum littoribus contraria ventorum tempestate impeditis, ventum venalem exhibere, mercedequae oblata, tres nodos magicos non cassioticos loro constrictos eisdem reddere, eo servato moderamine, ut ubi primum dissolverint, ventos haberent placidos; ubi alterum, vehementiores; at ubi tertium laxaverint, ita saevas tempestates se passuros, ut nec oculo extra proram in evitandis scopulis, nec pede in navi ad vela deprimenda, aut in puppi pro clavo dirigendo, integris viribus potirentur. (Olaus Magnus 1555: 44, III Book)¹²⁶

DeAngelo interprets the supernatural powers ascribed to the Finni as part of a generalistic northern stereotype that shaped broader narratives around all northern peoples: «the depiction of the Finnar serves to place them in the position of the exotic Other relative to Norse conventionality. For this reason, the attributes of the Finnar were readily transferrable to any non-conforming person or population that the writers of the sagas sought to vilify» (DeAngelo 2018: 210). The reputed control over the wind established as a persistent trope and one of the most enduring traits

¹²⁶ “Among other pagan errors, the Finns sometimes are accustomed to provide winds for sale to merchants stranded on their shores by adverse windy weather, and, given payment, give them in return three magic unbreakable knots tied to a band. This is how what they have is to be used: when they would undo the first, they would have calm winds; when the second, more forceful; but when they would release the third, they then would suffer violent storms that with their whole strength they could maintain no eye to watch for rocks beyond the prow, nor foot for lowering the sail into the vessel, nor at the helm in the stern to steer”

in foreign depictions of the Sámi. It became so widespread in popular imagination that it faced little skepticism even in the accounts of Johannes Schefferus, whose reputedly more accurate descriptions of the Sámi – based on his firsthand experience and expeditions – reinforced the narrative of a people capable of controlling the weather and even trading the wind (Schefferus 1673: 45, 58). Such attribution of supernatural powers to the Sámi does not merely reflect their exoticization, but also accounts for the awe of foreign narrators almost incredulous before Sámi's deep knowledge of the winds – irresolvable within their own ontological rationalization. While DeAngelo reads this exoticization as a generalizing and mystifying trait applied to many lesser-known northern populations (DeAngelo 2018: 209), a related account documented by Paolo Mantegazza draws on firsthand oral narratives passed down by the South Sámi priest and poet Anders Fjellner (1795–1876), from Härjedaelie (Härjedalen). According to the Indigenous epic poem *Biejjiēn baernien sãangoe jeahnaj laantese* (The Son of the Sun's Courting in the Land of the Giants) – which received an early Swedish transcription in van Düben (1873: 322–325) – after marrying the daughter of the giants, a descendant of Kallapårdne known as the Son of the Sun sails back home on his boat, pursued by his bride's brothers. To ensure a successful escape, the bride uses knots consecrated by Máttaráhkká, Sáráhká, Uksáhká (three Sámi mother-goddesses) – which were part of the bridal dowry – and summon winds that propel their boat faster, leaving the giants behind:

Il figlio del Sole allargando le vele l'ha involata.
 Vola in mare la barchetta dei fratelli
 Per inseguire e dare la caccia
 E restituire il poledro alla casa.
 Già si sente il batter dei remi,
 Più vicino si fa il rumor del timone
 E il muggire e l'infuriar delle onde. [...]
 (La sposa)
 Scioglie per difendersi un nodo virginale,
 Un vento allora gonfia le vele,
 E la barchetta rompe le onde
 Le getta da ambo le parti,
 E i giganti rimangono addietro. [...]
 E la sposa [...] Domanda allo sposo, facendogli riverenza:
 La tua barchetta può sopportare maggior vento?
 Solidi e forti sono l'alberatura e le sarte?
 Scioglie allora il secondo nodo sanguigno
 E il vento incomincia da occidente
 A sollevare i figli del mare (le onde),
 Gonfia e tende le vele [...]
 Sopporta la tua barchetta vento più gagliardo,
 Sopporta dessa più forte bufera?
 Scioglie allora il terzo nodo.
 Anche Ilma Razza montò in collera
 E il servo del dominatore del cielo.

Il vento del nord dal mezzo del cielo
Mandò la procella e piegò le antenna.¹²⁷

Similar to the practice of untying knots as reported by Anders Fjellner in the South Sámi oral tradition, another method for summoning the wind was shared with me by Kildin Sámi linguist and artist Roman Iakovlev while we were picking *luopmánat* (cloudberries; *Rubus chamaemorus*) in the locality of Guhkesjávri, 4 km east of Guovdageaidnu (Figure 21). Below, I transcribe this interaction from the relevant portion of my field notes, with an accompanying audio excerpt that can be heard in the beginning of the soundscape composition “Biegga” – track n. 3 in the audio-anthology *Muitalusat guldaleami birra*:

[Roman] scorse in lontananza una chiazza un po' più colorata ed esclamò: “You see down there? That's our goal, our gold!”, indicando con gesto deciso il lato opposto della torbiera. La pioggia aveva imperversato abbondante durante la mattina e il terreno si presentava evidentemente inzuppato. Ciò però non intimidì Roman che, piuttosto che circumnavigare l'acquittrino, iniziò a camminargli dritto attraverso. Ogni suo passo spremeva il soffice manto muschioso, sollevando sguaizzi d'acqua e un suono ovattato ai limiti del comico in quella quiete estiva: squash, squash, plosh... Man mano che si allontanava dalla strada battuta, però, notai che ciò che sollevava non era solo acqua, bensì anche gruppetti di zanzare smosse da una “preda” inattesa. Ad ogni passo, una nuvola sempre più fitta di insetti si addensava attorno a lui. Decisi allora di procedere aggirando l'acquittrino. Mentre mi trovavo a metà del cammino, un fischio squillante echeggiò improvviso nella distesa. Mi voltai e scorsi Roman accovacciato tra i bassi rovi, mentre, con mano rapida riempiva il suo secchio di bacche. Era stata per me un'esperienza acustica di raro fascino, con quel suono così limpido e intenso riflesso contro la parete di betulle che faceva da coro alla torbiera. Pur non comprendendo immediatamente la natura di quel suono, accesi prontamente il mio registratore, lasciando che i miei omnidirezionali fissassero ogni sfumatura dell'ecosistema sonoro circostante. Ero convinto che il fischio fosse giunto proprio dalla posizione di Roman, così lo osservai attentamente. Vidi che portava una mano alla guancia, e proprio mentre cominciavo a pensare che stesse semplicemente

¹²⁷ Mantegazza 1881: 200-202; The original swedish transcription of Fjellner in von Düben reads: «“Solens son, han som der seglar”. / Båten sköto de på djuvet, / att den unga efter jaga, / att brud-ämnet återföra. / Starka höras åre-slagen, / mumlet, talet, dån af vågor; / Första knuten flickan löser; / deraf blåser fläkt i seglen, / skjuter så på skeppet, smäller på vågorna; / jättens söner lemnas efter. / [...] / Bruden [...] ser på solens son och säger: / “Tål din båt mer starka vindar?” / “Masten, tågen, äro starka!” / Då hon löste andra knuten: / vestan började att blåsa, / lyfte hafvets barn i höjden, / sträckte, spände seglens bukar. / [...] / “Tål väl båten ännu mera? / tål han ännu värre ilar?” / Löste så den tredje knuten. / Då sjelf Ilmar, himlaherrskarus / förste tjenare, blir vredgad. / Stormen vräker, rårna böjas» (von Düben p. 324-325). A Sámi transcription of the poem has been edited and published by Harald Gaski (2003 [*Biejjiien baernie*, Davvi Girji OS, Karasjok]). This edition contains also an English translation of the text carried by John Weinstock, prosaically reported at the following link:

<https://www.laits.utexas.edu/sami/diehtu/giella/folk/sonarticle.htm>

gustando qualche frutto, udii nuovamente il forte fischio, questa volta più complesso e virtuoso nella forma:



“What’s going on?” Domando da lontano. “We need the wind but... there’s no wind to drive off the mosquitoes. There’s no wind, so they won’t leave us alone until we are done picking berries here”. Lo raggiunsi e presto fui anch’io inghiottito nella fitta nube di insetti. Mentre raccoglievamo le bacche insieme, Roman mi raccontò di come quello del fischiare per invocare il vento fosse un gesto che aveva appreso da un anziano del suo villaggio natale – Lujavvr – noto per la sua capacità di interagire con diversi elementi. Anche se non bastò a liberarci da tutte quelle zanzare, una leggera brezza si era effettivamente alzata, e io mi pentii di non aver preso la precauzione, nella fretta, di proteggere i miei microfoni con i soliti filtri anti-vento.¹²⁸

Towards this deep traditional knowledge of wind movements, Mai-Britt Utsi shared with me her sense of awe and admiration:

I’m thinking about my ancestors, when they didn’t have boats with engines, and they had to do only with *borjjas fanas*, sailboats. And they talked about just how easy it was to jump into a *borjjas fanas*, and simply go with the wind. Or even sail against the wind. They were true experts, you know, with their small boats with *borjjas* [sail], and they would just use the *valla* [rudder] for the direction. So, I’m very impressed by all my grandmothers and great-grandmothers who were able to handle the wind like that and go with the wind, sailing that fjord. *Doppe lea alo bieggá*. The wind is always blowing. The wind from the east, usually.¹²⁹

¹²⁸ “[Roman] spotted a more colorful patch in the distance and exclaimed, ‘You see down there? That’s our goal, our gold!’ pointing firmly toward the far side of the bog. The morning rain had poured heavily, and the ground was clearly soaked. Yet Roman, undeterred, decided not to go around the marsh but to walk straight through it. Each step squeezed the soft moss, sending up little splashes of water and making a muffled, almost comical sound in that summer quietude: squash, squash, plosh... As he walked further from the main path, I noticed that it wasn’t just water he was stirring up. Small parties of mosquitoes, awakened by this unexpected visitor, began to rise with each of his steps, gathering into a thick cloud around him. I decided to take the long way, walking around the marsh. Halfway through, a sharp whistle suddenly echoed across the landscape. I turned and saw Roman crouched in the low bushes, quickly filling his bucket with berries. To me, that was a moment of rare acoustic beauty, that clear and strong whistle as it echoed against the line of birch trees that bordered the bog. I didn’t immediately understand what I was hearing, but I turned on my recorder, letting my microphones take note of every shade of the surrounding sonic ecosystem. I was convinced that the whistle had come from Roman, so I watched him and saw him lift a hand to his cheek, and just as I thought he might simply be enjoying a freshly-picked berry, I heard the whistle again, this time more elaborate. ‘What’s going on?’ I called out. ‘We need the wind but... there’s no wind to drive off the mosquitoes. There’s no wind, so they won’t leave us alone until we’re done picking berries here’ he replied. I joined him and was soon enveloped in the same thick cloud of insects. As we picked cloudberries together, Roman told me how he had learned to summon the wind from an elder in his home village of Lujavvr, a man known for his ways with the elements. Though it didn’t drive off all the mosquitoes, a light breeze did start to stir, and I regretted not having taken the time to protect my microphones with the usual windshields.” (Guhkesjávri, July 27, 2023)

¹²⁹ Mai Britt Utsi, Oral teaching (personal communication), July 3, 2023, Guovdageaidnu.

Juoigi and reindeer herder Nilles-Jouni Aikio highlights how, despite a deep familiarity with the weather, the wind remains a highly unpredictable force, which is precisely why «you must listen carefully to the variations in the wind if you don't want to lose the herd».¹³⁰ A similar sensibility towards the herd is also manifest in Turi's account, where

[...] dakkár olmmoš, gii lea lossat nohkkat, son gale báhcá nohkkat livvasadjái. Ja go viimmat moriida, de ii dieđe, gosa lea eallu mannan, jos lea bievla. Muhto go son manná vuostebiggii, daihe go son diehtá, gosa dan báikkis háliida boazu, de son manná ja guldala ja deinna goansttain gávdná ealu. Ja jos eallu lea mannan visot ovttá guvlui, de gal oažžu fas ealu čoahkkái, go leat guokte olbmo nugo lávejit. [...] Muhto jos lea soames oassi mannan iežá guvlui, de gale son láhppo (Turi 1910: 16).¹³¹

Ingold reminds us that considering knowledge of the weather and the skills developed from it as part of a traditional livelihood should not be understood as the «enactment of a received script» but rather as an incessant negotiation and assessment of the world, with and within the world (Ingold, Kurttila 2000). What European travelers and missionaries for centuries labeled as “sorcery” was, in fact, the outcome of a deep and sustained engagement with the natural environment – which granted the Sámi an extraordinary ability in «detecting even the slightest variation in all environmental forces», including particularly «the speed and direction of the wind» (Ligi 2016: 85). Ultimately, the Sámi may not have learned to “tame” or “use” the wind; however, by allowing it to speak through the land and attentively listening to its complex voice, they learned how to navigate with and within it (cf. Gaski 2019: 262).

As mentioned, the direction and intensity of the wind are primary factors in directing reindeer along the seasonal routes (*geinnodat*) between inland areas and the coast. *Biegga* not only aids the ethology of reindeer as a natural compass but also has influence over other important ecological factors, including the qualitative and quantitative variations of lichen pastures and the density/consistency of snow and ice that reindeer must dig through to find sustenance (Forbes et al. 2006: 8; Riseth et al. 2011: 204; cf. Eira 2011). During the summer, herds seek out wind-exposed areas – such as ridges and high grounds – to escape the torment posed by the ubiquity of black flies (*muogir* and *čurot*; *Diptera: Simuliidae*), mosquitoes and midges (*čuoika*; *Diptera: Culicidae*),¹³² often trotting against the wind to avoid

¹³⁰ Nils-Jouni Aikio, Oral teaching (personal communication), August 13, 2019, Levi.

¹³¹ “that sort of person who is a heavy sleeper will certainly get left behind at the resting place. And when the herder wakes at last, that herder won't know where the herd has gone unless there is snow. But if the herder travels upwind, or knows where the reindeer in that area likely to go, then the herder can go there and listen, and in that way find the herd. And if the herd has all gone in one direction, then the herder will get the herd together again, especially if there are two herders, as is usually the case. [...] But if some part of the herd has gone in another direction it will certainly be lost” (Turi 2011: 28).

¹³² Beach 1981: 84.

predators that might catch their scent (see ‘Čuoika’).¹³³ Among reindeer herders, a common saying is *boazu lea biekka ja dálkki oapmi* (Skaltje 2005: 144),¹³⁴ which refers to the reindeer as *biekka buorri* – the “good of the wind”.¹³⁵ This expression underscores the limited human control over the movement of the herd, compared to the considerably greater influence of *biegga*, upon which the survival and success of this traditional livelihood is largely reliant (Skaltje 2005: 144; Sara 2009: 172).

The ecosystemic complicity between wind and reindeer is a recurring and cross-cutting theme in Sámi storytelling. The expression “*biekka buorri*” with all its implications, for instance, is preserved and transmitted orally through a notable number of *dajahusat*. These expressions reinforce the previously mentioned reciprocity and interchangeability between the ecology of environmental sounds and the ecology of *juoiggus*, where the latter is returned to the Land through performance, enriching it with interpretations, skills, values and sentiments. The *luohti* and the poetic content of *Biegganjunni* – a compound word derived from *biegga* (wind) and *njunni* (nose) – present one of the remaining oral records exemplary of wind knowledge in the echosystem that follows the migration of the reindeer, as previously outlined.

I came across this *dajahus* in its Swedish translation by Sámi linguist Israel Ruong. It was originally featured in the booklet of the *Jojk* EP, produced for the Jokkmokk Museum (Ájtte), and accompanied by a renowned performance of the *luohti* by the *juoigi* and priest Johan Mäarak (Audio 2). In Davvisámegiella, the *dajahus* recites:

*Biegganjunážat jo njolggidedje
bielložat jo skilardedje go jo
biekka vuostá njuni ceggeje
Biegganjunni, bieggabuorre njolggidedje lo lo lo
Ii lean gal jo heahti guhká go jo
ruovggade jo biegganjunážat*¹³⁶

The first line of the *dajahus* already discloses how *biegganjunni* serves as the trope for the reindeer. The trot, the sound of bells and the grunting are distinctive elements that disambiguate the sonic presence of the animal in the *luohti*. *Biegganjunni* encapsulates in a single verbal image the instinct of the reindeer to

¹³³ Notably, the wind’s ability to sweep away mosquitoes and other Arctic flies was a quality particularly appreciated also by travelers who crossed the region during the summer (see below; Negri 1700: 107; Acerbi 1802b: 91; Mantegazza 1881: 85).

¹³⁴ “The reindeer are the asset of wind and weather”.

¹³⁵ “Ante Aikio, Oral teaching (personal communication), June 2, 2021, Levi; Mathis Eira, Oral teaching (personal communication), June 20, 2023, Guovdageaidnu; Mai Britt Utsi, Oral teaching (personal communication), July 3, 2023, Guovdageaidnu.

¹³⁶ Transcribed by Johan Mäarak in *Jojk, Vuolle, Luohti* (recorded in 1962), translated into Swedish by N.E. Spiik. English translation: “The wind snouts trot / the bells chime when / they turn their noses to the wind. / The wind snouts, the good of the wind trot. / There is no danger / as long as the wind snouts grunt”. Another *dajahus* referencing *biegganjunni* can be found in Skaltje (2005: 35).

always point against the wind, orienting their snout accordingly and following every subtle variation in *biegga* (Beach 1981: 91). As such, the reindeer is portrayed in another *dajahus* transcribed in Skaltje (2005: 254)

Silke njavvi
manná dego beaivesuonjar
*vuostebiggii*¹³⁷

The same EP that includes *Biegganjunni* features another *luohti* labeled as “Biegga”, whose *dajahus* opens and closes with the symbolic lines, «Now the wind blows / [...] / And the reindeer trot against the wind», further reinforcing this ethological aspect of the animal and its link with the atmospheric force. In the third verse of the *Biegganjunni luohti*, the aforementioned expression *biekka buorri* is stated as a synonym for the title idiom, thereby adding greater depth to the relationship between the wind and the Cervidae. It reinforces the central concept of the wind as primary force guiding the herds – for better or worse, as implied by the concluding lines of the *dajahus*.

Delving into the lexicon of *biegganjunni* reveals additional semantic nuances around this term. The imagery associated with the restless motion of the reindeer turning with the wind translates this expression as a metaphor for the whirlwind, as a specific type of air movement wherein *biegga* lifts snow into swirling vortexes, hints at calming down, only to abruptly resume with even more intense and erratic motions (*bieggačuolbma* or *jorribiegga*; Figure 22). The metaphorical language here reveals a kinesthetic parallel between the movements of reindeer herds and the swirling wind, while the morphology of the *luohti* establishes direct (more-than-musical) sonic relationships between the *juoigi*, the *juoigglmas* and who listens. It has been noted in the Introduction how the morphology of a *luohti* – through its mimetic quality (Diamond 2019) – is a crucial factor in encoding and audibly conveying the unique character (*luondu*) pertaining to different subjects, enabling the listener to distinguish them between homonymous *luodit*. This quality of *luohti* is vividly expressed by *juoigi* and reindeer herder Lars Henrik Blind (Máreha Lásse Lárs Heaika):

Mon jáhkán, ii miigege eale, jus das ii leat juoga nu luđiid maid. Dat šattalii oba ránis ja guoros dat máilbmi, jus ii máhte bagadallat maidege. Ovdamearkka dihte go boazu čuskkoda. Dan ferte dego hábmet dan bohcco luđiin [...]. Luondu dego ieš luvve luodí. Du dovddut rahpasit. Luondu hupmá duinna dainna málliin. (in Skaltje 2005: 255)¹³⁸

¹³⁷ “The one with silk-like hair / shining like a sunbeam / against the wind”

¹³⁸ “Nothing comes alive unless it has a *luohti*. The world would be grey and empty if it couldn't be described with *luodit*. For instance, when the reindeer gallops, *čuskkodit*, that motion must be captured in the reindeer's *luohti* [...]. The nature itself seems to release the *luohti*. Your emotions unfold. Nature speaks to you this way.”

In the case presented, whether the word *biegganjunni* refers to the movement of reindeer or the motion of a whirlwind, the *luohti* of *biegganjunni* caught by Wimme Saari no longer serves as a trope just for the animal but rather manifests the *luondu* and swirling motion of the wind gust itself (Audio 3).¹³⁹

As something more-than-music, *juoiggus* is capable of establishing immediate sonic reciprocities between different Earth beings. Regardless of the performative context or the nature of the *juoiggalmas*, a fundamental aim of *juoiggus* has ancestrally been to capture the *luondu* of the subject joiked within a specific *luohti*. The ability to express these distinctive qualities is equally contributed to by the sensible combination of the melodic-rhythmic morphology, the formulaic concatenation of asemantic or onomatopoeic syllables, the skillful use of vocal range and timbre and, at times, words and body language.¹⁴⁰ Although Johan Mäarak catches *biegganjunni* as the *luondu* of a reindeer and Wimme Saari evokes it as the frenetic motion of a whirlwind, a simple morphological comparison of the two *luodit* reveals that both *juoigit* employ similar musical gestures, which predominantly converge in the rhythmic and agogic consistency of the voice, in the inclination towards wide intervals and leaps and in the pronounced gravitation of the *luohti* around the keynote (Figure 23). A listener aware of both the lexical ambiguity of the *dajahus* and the morphological descriptivism of the *luohti* will discern the dual nature of *biegganjunni* – as the erratic wandering of the reindeer and the sonic gestures of a swirling wind tend to mirror each other in their *luondu*.

¹³⁹ Wimme Saari's yoik is accessible at <https://www.youtube.com/watch?v=6Rxu-mBkKZs> (last accessed: 29 October 2024). As further evidence, it can be observed that Wimme Saari later sampled this *luohti* to re-sequence it in the track "Biegga" (Human, 2017), aiming to evoke the sonic presence of the wind through joik:

https://www.youtube.com/watch?v=GmnZWhEdkHE&list=OLAK5uy_kBiGg-SiSkI8lzOeWAszpTItw4DAtg3XI (last accessed: 23 October 2024).

¹⁴⁰ Wimme Saari, Oral teaching (personal communication), August 16, 2019, Aanaar.

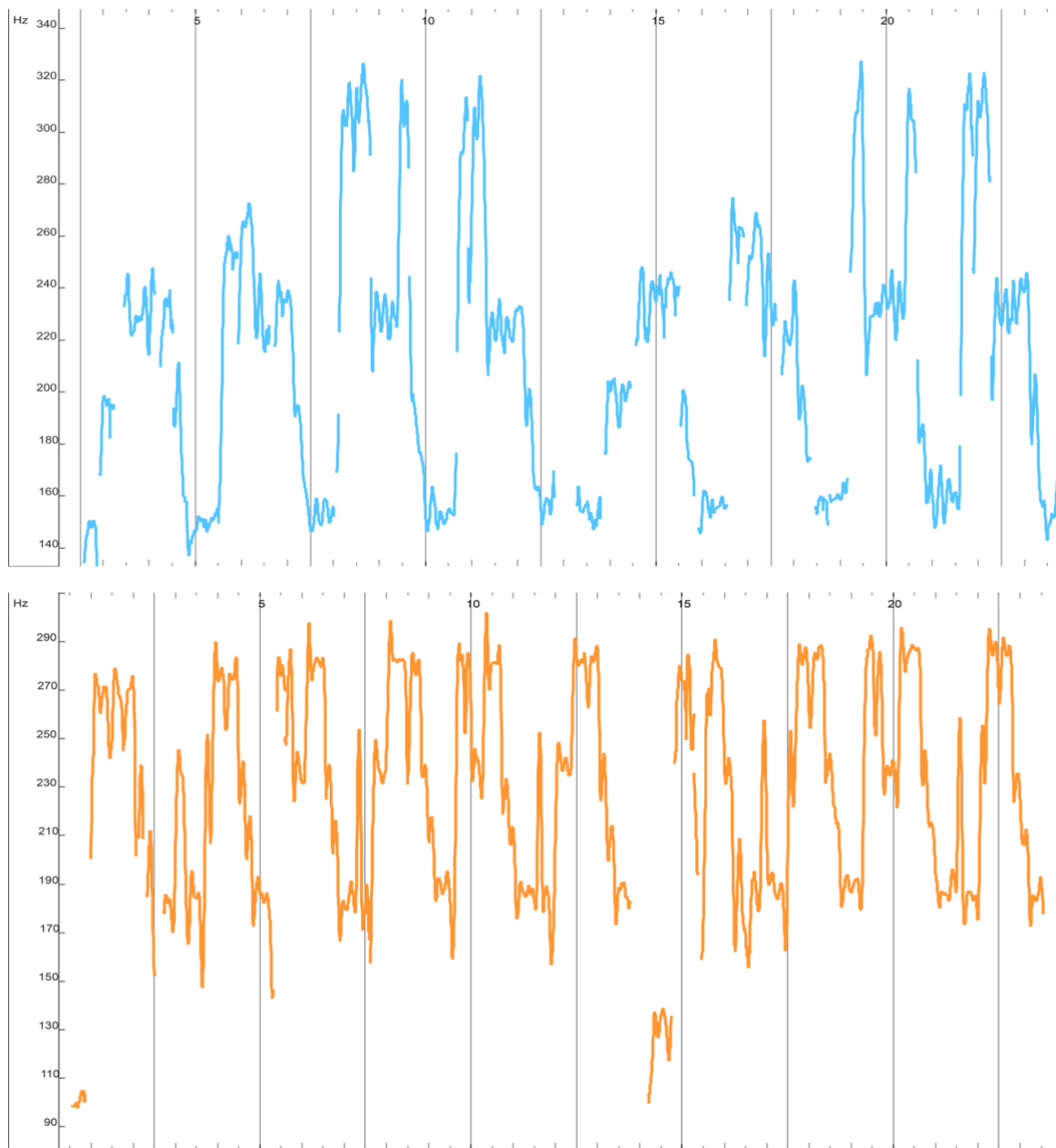


Figure 23 Side-by-side pitch contour visualization of Biegganjunni in Mäarak (blue) and Saari (orange).

Biegga juoiggaha¹⁴¹

Just as in the repertoire devoted to animals, where a single *luohti* is traditionally associated with each animal species in a manner that follows an almost taxonomic systematicity – allowing for local variations and originality towards more domesticated animals (see above) – a few distinct and easily recognizable *luodit* have also been standardized for *biegga*. The most renowned and frequently joiked wind *luohti* is the one popularized by Nils-Aslak Valkeapää (Áillohaš) in his first LP, *Joikuja* (1968) (Audio 4). In this album, the *luohti* serves as the closing track of

¹⁴¹ “The wind makes one joik”

what is historically recognized as the first record of “modern joik” (Jones-Bamman 1993; see also Renzi 2019). Although the original title does not explicitly indicate it, referring to it as “(Ei Sanoja)” [No Words], this *luohti* was later identified by Valkeapää as the wind, and therefore from this point onward, it will be referred to as the *Biegga luohti* – the title by which it also became established in the subsequent discography (Sara Jr. 1995; Andersen 1999; Áilloš 2007; JUUSK 2011).

It is notable how the recognition of the wind in this *luohti* coincides with a historical moment of pan-Indigenous solidarity and the global recognition of Sámi Indigeneity. In 1975, Valkeapää participated in the first meeting of the newly formed World Council of Indigenous Peoples (WCIP) in Port Alberni, British Columbia, hosted by the Tseshah First Nation and attended by delegates from over 250 Indigenous peoples from every continent. As Ánde Somby recalls, there was initial suspicion in the hall regarding the prominent role of the Sámi at the conference, owing to their «undeniably paler skin tone, which for some was also accompanied by blond hair», calling their Indigeneity into question (cf. Crossen 2014: 173). Despite verbal efforts to explain a shared history of social and environmental oppression, it was when Valkeapää stood up and joiked the wind that everyone turned and «recognized [the Sámi] were not white» (Valkeapää in Nyysönen 2007: 214). By carrying the wind in his voice within such a pan-Indigenous context, Valkeapää became an advocate not only for a subjectivity symbolically elevated to *being* by many Indigenous ontologies around the globe, but also for an ontology that challenged the sharp division between humans and nature:

This explains the fact that yoik acted as a sort of common language, as a distinguishing feature of the meeting at Port Alberni. (Valkeapää 1971 [1983]: 115)

In the original recording of this *luohti*, Valkeapää’s voice is announced by the wind itself, whose sampled voice carries on throughout the track since its start, engaging in a sort of eco-polyphony with Áillohaš. The use of field recordings in the studio was an unprecedented practice in Sámi music production at the time. However, following the success of *Joikuja*, the powerful interplay of human and other-than-human voices in *juoiggus* became an emblematic expression of the aesthetic virtualization of the landscape in Sámi music production (Ramnarine 2009; Diamond 2007; Hilder 2017; Renzi 2021a).

On a morphological level, the *Biegga luohti* articulates as a brief period in an ABCB form, divisible into two complementary phrases that hint at a ternary meter. The melody predominantly gravitates around fifth and major third intervals, with pitch excursions that exceed the octave range in both the upper and lower registers (Figure 24). The extensive use of grace notes, along with shifted accents – as seen in the case of *Biegganjunni* – enhances the mimetic qualities of the *luohti* and, in turn, the sonic representation of the wind, allowing the *juoigi* to blend his voice with that of *biegga* and creating a counterpoint with the field recording. Additionally,

the prevalent use of back vowels, particularly combinations of close and close-mid vowels (/u/, /o/, /uo/, /oo/), along with the strategic initial use of falsetto, further supports the phonetic mimesis of the *juoiggalmas*.

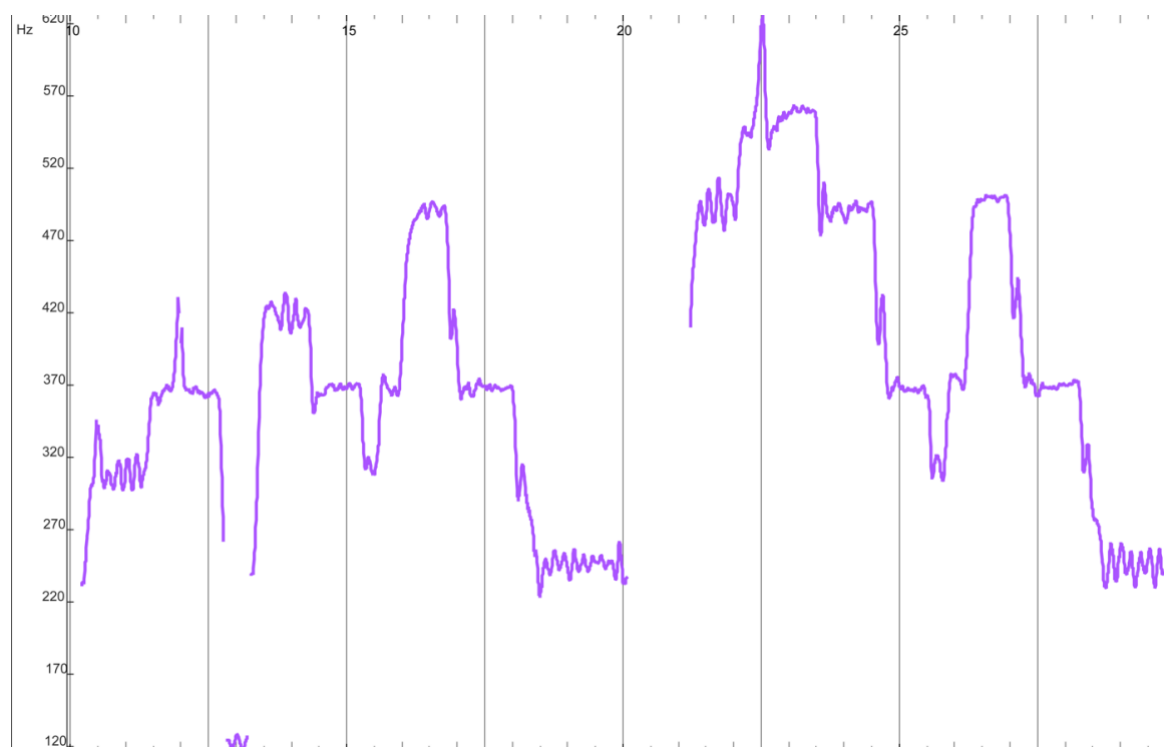


Figure 24 Pitch contour visualization of Áillohaš' *Biegga luohi* in *Joikuja* (1968).

The acoustemological distinction between the two sonic codifications of the wind just examined – the *luodit* of *biegganjunni* and *biegga* – is evident both aurally and when graphically tracing their respective pitch contour. While the intervals largely align between the two, of the abrupt leaps in register and tempo employed in “Biegganjunni” to evoke the *luondu* of a whirlwind, only a distant impression remains. In the *Biegga luohi*, the underlying acoustemology rather conveys the *luondu* of a gentle breeze [*bieggahieibma*, *bieggajiellat*, or *jáldobiegga*], yet one that remains sustained and overwhelming [*biekkahaddat*], sweeping across the *duoddarat*, skimming the snow on the frosty ground, and insinuating beneath the canopies of birches and conifer trees, where it accumulates and resonates powerfully in the vast natural aisles of the boreal forest. This style, marked by sustained notes and reverberating crescendos, has become iconic and widely interpreted across Sápmi as the quintessential representation of *biegga* (Sara Jr. 1995; Andersen 1999; Áilloš 2007; JUUSK 2011).

The communicative resources and strategies described above often reach our ears as logical models passed down as musical knowledge. However, it is essential to recognize how *luohi*, before being substance and structure, represents a process. Its performance is the manifestation of an echosystemic link and the outcome of an

epistemic co-evolution that involves individuals, communities and their environments. This co-development is rooted in a centuries-old aesthetic understanding of the kinships across Earth beings and places, which is in turn encoded and communicated in form of *luohti*. The acoustemological foundation of this vocal tradition is the act of listening to the voice of other Earth beings within the environment:

Each *luohti* is the result of a deep and focused listening to the world and within the world. In order to joik them, it is essential to hear and understand what the wind, the river, the ptarmigan and the wolf are communicating us through their voices. Starting from this acknowledgment, one's voice will truly develop the skill to give the *luohti* a pair of wings to fly back to its owner.¹⁴²

Biegga has inspired *juoiggus* throughout Sápmi for centuries (Valkeapää 1985; Finbog 2022a). Its role within this biocultural heritage, however, extends far beyond being an object of sonic mimesis or simply a *juoiggalmas* evoked through human vocalizations. Rather, the wind is highly esteemed as one of the most knowledgeable other-than-human bearers and carriers of *luodit*. Drawing from numerous and assorted stories collected throughout Sápmi, Maj-Lis Skaltje describes how it is not uncommon for people to apprehend *luodit* from the broad vocal range of *biegga*:

Ja juoiganjienaide sámít leat váldán ovdamearkkaid luonddus. Biekkaid njurgumat ja čeargumat, jogaid šavvamat leat sámiid oahpahan got jiena galgá sojahallat, vanahallat ja veajahallat. Nu dat leat dološ sámít váldán oahpa go leat velohallan goadis. Dat leat guldalan biekká go boahhtá soigiid meaddel, lagežiid čada ja gullan got muorat šuvvet. Luondu lea leamaš oahpaheaddji (Skaltje 2005: 285).¹⁴³

In various stories compiled in her anthology, Skaltje suggests that cultivating a serene disposition toward environmental listening is crucial to welcome *biegga* as a source of inspiration [*juoiggaha*]. This sentiment was echoed by Mai Britt Utsi, who recounted to me how many times she would lie down inside the *lávvu* [traditional temporary dwelling, conic tent],

and you may be half asleep, half awake – *adjágasas*, as we say in Sámi – when the wind comes with its sounds. You can hear it interacting with the cloth of the tent, and sometimes there is a melody in there. Yeah, that's how it can be.¹⁴⁴

¹⁴² Ánde Somby, Oral teaching (personal communication), May 19, 2021, Sirbmá, Sápmi.

¹⁴³ “The tones of *juoiggus* have been influenced by the sounds in nature. The winds’ whistling and roar, and the murmuring of streams have shown how the voice can be bent, stretched, and altered. The ancient Sámi lay on the reindeer-skin-covered floor and learned. They listened to the wind as it passed through the trunks of the mountain birches and heard the whisper of the trees. Nature has been the teacher.”

¹⁴⁴ Mai Britt Utsi, Oral teaching (personal communication), July 3, 2023, Guovdageaidnu.

Starting from comparable impressions, Brita-Maria Utsi (*Báluha Biette Biret Márjá*) suggests how the unique “way of singing” [*lávluovuohkki*] of the people of the mountains and forests derives from a deep connection with the aural perception of the wind, specifically mentioning the interactions with the *lávvu* cloth:

Ja sáhtta maid guldalit dan jiena go gulat biekká, go dat bišku loavdagiid vuostái. Dainna málliin sámít leat ožžon iežálágán lálunvuogi. Dat dahke lálvlluid ilmmi jienaid mielde, daid jienaid maid gulle. Dat guottáhalle mihá fiidnábut. Dat máhtte. Dat lei juste go bieggá. Ii leat gallát mii máhtta njurgut, nu guottáhallat juste go bieggá. Hui guhkit. Justego guhkkinn bohtá bieggá, máhtta doallat jiena nu juste das dego. Dat ii leat gallát mii máhtta dan. Ja dat gii máhtta, dan lea somá guldalit. (in Skaltje 2005: 56)¹⁴⁵

Apart from a serene and homely emotional disposition, cognitive and expressive skills are certainly crucial. Not everyone develops either the sensitivity to hear *luodit* in the wind, neither to be inspired from its voice. This was confirmed to me by Mathis Eira, describing the sonic relationship with *bieggá* in *juoiggus* as an exclusive interplay that requires necessary competences to be mastered:

Sometimes it’s the wind that starts the joiking, and skilled people might join. They find a rhythm in the environment they are in. It’s like a natural form of rhythm in the environment that perfectly combines with that of joiking.¹⁴⁶

Similar to other circumpolar cultures, the Sámi have not developed specific interests in fostering a significant variety of musical instruments (Emsheimer 1947; Senungetuk 2017; Renzi 2023b).¹⁴⁷ The circumstance of such an apparently scarce

¹⁴⁵ “One can listen to the sounds of the wind, how it howls against the tent cloth. This is how the Sámi people developed a different way of singing. They created songs inspired by the sounds in the air, by what they heard. They raised their voices beautifully. They could. Just like the wind. There are not many people that can blow for as long as the wind can. Very long. Just like a wind that comes from far away and sounds for a long time. Not many can achieve this. But listening to someone who can is very pleasant.”

¹⁴⁶ Mathis Eira, Oral teaching (personal communication), June 20, 2023, Guovdageaidnu.

¹⁴⁷ While early ethnographies conspicuously appear to have overlooked entirely the existence of musical objects in Sámi material culture, nowadays the Indigenous instruments documented and established in literature are only two: these are the *goavddis* and the *fádn*. It is important to acknowledge that the designation *goavddis* belongs to the North material tradition, while different nomenclatures and morphologies of the drum – such as *govadas*, *goabdes*, *gievrie*, *meavregárri* or *rumbu* – underline the linguistic and material diversity of Sápmi. As for the nomenclature of the *fádn*, an ephemeral aerophone considered extinct in the historical sources and made from the natural green stalk of the *Angelica archangelica*, see Emsheimer (1947: 86). Apart from the *fádn* and the *goavddis*, several other sonorous objects are still crafted and employed within and outside *juoiggus*. While a footnote may not be the ideal space to bring light onto these cases, it is imperative to acknowledge the existence of a wider range of instruments that have been overlooked or even omitted in past and current literature. Although some of these objects are found also in neighbouring Nordic music cultures, in her major work on *juoiggus*, Maj-Lis Skaltje stresses the presence in Sápmi of willow bark whistles [*lullogat*], strung rattles made from rows of metal buttons on a cord [*skuvanat*], concussion reeds obtained from the vibration of two leaves pressed together by a bark frame [*spížohat*], vessels idiophones recovered from the metal buckets used during the cloudberry picking [*spánnjät*], a chordophone [*bongolajka*] with a single string – typically used for rievssat [*Lagopus lagopus*] hunting – fixed on one end to a resonator box while not fixed on the other end,

variety is read as a symptom of Sámi early semi-nomadic history and Arctic harsh conditions, which discouraged the carriage of burdensome objects along reindeer trails, and rather catalyzed the development of a highly sophisticated vocal tradition:

Juoigan lea luonddu olbmuid musihkka. Dološ sámít leat leamaš johtti olbmot. Ja dat gii álo lei jođus, das eai galgan leahkit olu dávvirat. Eaige makkárge liigedinggat. Sierra musihkkačuojanasaide doppe eai leat gáv-dnon sajít. Ealige musihkkainstrumeanttat muđuige dáidán čuodjat muohtaguoldduid ja buollašild siste. Iige bivdi háledan bivdoelliid baldit Ja ráfehuhttit. Iige muđuige háledan billistit luonddu jaskatvuoda. Danin dološ sámiiide gárttai olbmo jietna váldočuojanassan go musihka ráhkadedje. Juohke olbmos lei jietna. Dat lei álo mielde. Ja dan máhtii oluládje geavahit go obba goruda válddii veahkkin, giedaid, julggiid ja geahppáid. (Skaltje 2005: 284)¹⁴⁸

It has been said how, in ethnographic literature, *juoiggus* is defined as a solo vocal practice traditionally performed without accompaniment. However, as Indigenous accounts reveal, other-than-human beings participate to its performance to an extent that *juoiggus* is said to originate from nature and to thrive in open environments. Listening-with Sámi ontologies and acoustemologies reveal *biegga* as a sonic actant capable of intervening or accompanying polyphonically and polyorganically a *luohti* (Renzi 2023b). In light of this, Mathis Eira further elaborates on how the wind «sets the joik in motion», providing rhythmic and sometimes harmonic support.¹⁴⁹ Comparably, Berit Maria Labba (Ánne Duommá Biette Biret) recalls

where it is manually stretched through the aid of a knife [*niibi*] to obtain unstable pitches that imitate the flow of joiking. I owe this knowledge to conversations with *juoigi* and researcher Mai Britt Utsi prior to the reading of Skaltje (2005). Among the Eastern Sámi communities, in the Kola Peninsula, strung and stick rattles (known as ‘кэ́нни́’ and ‘шэ́рдэгк’ in Kildin Sámi language) are commonly crafted from reindeer hooves and antlers (Roman Iakovlev, Oral teaching (personal communication), March 20, 2023, Guovdageaidnu. I personally observed a strung rattle crafted in Gárasavvon and obtained from reindeer hooves strung in rows on a cord and struck by Inger Marie Nilut as rhythmic accompaniment to the performance of Bikko Biera *luohti* (5 April 2023, *Etniín juoiggadeimme*, Davvi Division, Guovdageaidnu). In addition to these more “conventional” idiophones, it is worth noting the significant role played by silver jewelry hung to traditional Sámi regalia. While dancing and swinging to the rhythm, these pendant rattles produce a characteristic jingling pulsation that adds to the overall sonosphere of the performance. Reindeer bells are also a prevalent sonorous object in Sámi material culture, although they are not necessarily used for musical purposes and are managed by other-than-human animals. To this list of idiophones, Soloviev has briefly described the presence of a whirling aerophone known as *Наввѣт* in the material culture of the Russian Sámi (Soloviev 2015).

¹⁴⁸ “The joik originated from a nature-based people with a nomadic lifestyle. For someone always on the move, there shouldn't be too many possessions, nothing excessive. There was no room for unnecessary musical instruments. Moreover, not many instruments work well in snow and cold. Naturally, a hunter would avoid scaring away their game with unfamiliar sounds. And someone traversing nature wouldn't want to create noise and disturb the peace. Nature itself invites tranquility. Therefore, the Sami people's voice became the most important instrument when composing their music. Every person also has a voice, and they always carry it with them. It can be used in various ways when the body, hands, legs, and lungs are employed together with the vocal cords in the throat.”

¹⁴⁹ Mathis Eira, Oral teaching (personal communication), September 21, 2022, Suohpatjávri.

[...] got dat ovdal láveje juoigat. Čohkahe dievvágilggas elege dievá nalde ja juige. Elege soames geađggi nalde čoahkahit ja juiget, ja bieggá de speallá. Bieggá lea čuojanas, bohccot, na gait, olbmot ja visot.¹⁵⁰ (in Skaltje 2005: 98)

These observations suggest that *juoiggus* is often stimulated and influenced by external factors, where environmental sounds (or other-than-human voices) naturally provide rhythmic, melodic or harmonic support. Consequently, these examples challenge the ethnographic definition of *juoiggus* as exclusively ‘unaccompanied’ vocal tradition, calling into question the notion of musical instrument in Sámi and other Indigenous frameworks, urging it past what is only humanly manageable and opening it up to other-than-human agencies. In a recently published paper (Renzi 2023b), I provocatively engaged with the concept of “musical instruments” when encompassed in more-than-musical heritages. The word “instrument” carries in the connotation of something constructed or at least implemented by human craft, rendering its definition seemingly incompatible with environmental phenomena such as the wind (ibidem). However, this etymology only holds true for ontologies constructed upon nature-culture dichotomies, and Sámi ontologies, along with many other Indigenous and non-indigenous worldviews, are alien to this perspective.

The idea of *biegga* as a teacher and carrier of *luodit* is a recurrent *topos* in modern Sámi poetry (Dana 2003: 73; see below). The work of Áillohaš, a Sámi artist who particularly cultivated a lyrical relationship with *biegga* and who compared the structure of *luohti* to the wind touching the surface of the *duoddarat*, aptly exemplifies this narrative that captures the wind as an active participant and bearer in the tradition (Skaltje 2005: 290; cf. Dana 2003: 68, 77; Aubinet 2020a: 153). I do not wish to dwell on the topic of modern poetical and artistic translation of the tradition, as it has been discussed in contrasting terms by both Sámi researchers and outsiders. Aubinet, for example, summarizes two positions, citing musicologist Ola Graff, who framed the discourse of wind musicality as largely influenced by a historical context that sought to revive Sámi culture and define *juoiggus* in harmony with “nature” and thus in contrast to neighboring European musical traditions (Aubinet 2020a: 156; cf. Graff 2018). On the other hand, he cites the suggestions from Sámi philosopher Nils Oskal according to whom Valkeapää’s poetry was merely metaphorical, emphasizing that what the poet wanted to convey was the importance of listening to nature, adding that «there is nothing mystical in that» (Aubinet 2020a: 155).

In this section, through assorted voices and experiences, I hope to have illustrated how, sometimes, «when the wind howls, people feel compelled to joik. That’s how it is», as Nils Anders Påve (Duopmáš Jovvna Ántte Juhána Nils-Ánte)

¹⁵⁰ “[...] how they used to joik in the past. They would sit on a hillside or a mound and joik. Or they would sit on a rock and joik, with the wind playing along. The wind was an instrument, just like the reindeer, the people and everything else around”

aptly summarizes (in Skaltje 2005: 234). The wind and its powerful influence – *bieggafápmu* – are an inexhaustible source of *luodit* that, just like gusts of wind, sometimes «com[e], and you can’t resist it» (ibid: 96). These descriptions largely present *biegga* as *juoiggalmas* and *juoiggaha*. However, further complexities arise when *biegga* is engaged as a skilled *juoigi*. In dominant ecologies, the wind is viewed as an abiotic, non-sentient component of the environment, and the geophonic essence of its voice accordingly renders more akin to an inanimate sound. The following section, therefore, explores *biegga* as a *juoigi*, not only endowed with vocal agency but also revered as one of the most vital and skilled other-than-human bearers and custodians of the *juoiggus* biocultural heritage.

Biegga juoigá¹⁵¹

Shortly after coming home from fieldwork, in an exchange of field recordings with *juoigi* and scholar Mai Britt Utsi, she forwarded me a video of the wind blowing through the dwarf birches near her house in Guovdageaidnu, captioning it with the following message:¹⁵²

10 AUG AT 09:03



Now here is very windy, and In
the wind you can hear the
joiking...

If, in the previous paragraph, it has been illustrated how, through the performance of respective wind *luodit*, the voices of Wimme Saari and Áillohaš become wind and are perceived as such by knowledgeable listeners, Sámi onto-epistemologies remain open to the idea of *biegga* as a highly skilled *juoigi*. According to Siri Maria Blind (Ellá Biette Healkka Ántte Sire Márjá), particularly in relation to landscape *luodit*, the *juoiggalmas* joiked by the southern wind manifest as vividly as only the most skilled performers of the past could render them (in Skaltje 2005: 112). The most well-known example of this adeptness of *biegga* to joik comes from the following passage in Áillohaš’s poem *Ruoktu Váimmus* (1985) that, as mentioned earlier, has been critically examined on the premises of non-human musicality by Aubinet (2020a: 155-156):

<i>ja duoddariid biekkat juige</i>	and the tundra winds yoiked
<i>vumiin gorssain legiin vuonain</i>	in the forests gorges valleys
<i>čuojai luonddu sinfoniia</i>	the symphony of nature resounded

¹⁵¹ “The wind joiks”

¹⁵² Mai Britt Utsi, online communication, August 10, 2024.

Through a philosophical and phenomenological inquiry, Aubinet describes the perception of *luodit* in the sound of the wind as a situation of “enchantment” [*lihkahus*], triggered by the fact that *biegga*

like the yoik, never chants itself: *it always sounds in relation to something*. [...] When blowing in the valley, the wind brings its presence forth to attention, it provides it with a more intense voice. The valley, earlier silent, is revealed as a chanter performing ‘the symphony of nature’, or ‘the sound of life’ (Aubinet 2020a: 157).

Aubinet’s reference here draws from David Abram’s his interpretation of wind as the revelation of the diverse dialects of trees (ibid: 158; Abram 2010: 171). It is reasonable to relate the enchantment described by Aubinet to what Schafer terms “aural illusions”, with reference to the wide range of frequencies and spectral variations of the wind as it interacts with specific topographies – here, ice formations in the tundra and the rocky ridges of the Scandinavian Mountains. However, the idea that *biegga* itself may be a skilled *juoigi* – emblematically suggested by Valkeapää’s line, “*ja duoddariid biekkat juige*” – is profoundly resonant and tangible within the ontology of *juoiggus* and the narratives the Sámi create in relation to this distinctive other-than-human agent.

Among the interpretations of the aforementioned *Biegga luohiti*, one in particular tells much about the semiological reciprocities of *juoiggus*, as well as the onto-epistemological position of this practice within the more-than-musical ecologies of Sápmi. I am referring to the second movement of the *Juoigansinfonija* [Joik Symphony], an orchestral piece by Finnish composer Seppo Paakkunainen, based on “musical ideas” expressed by and negotiated with Nils-Aslak Valkeapää.

In 1980, stimulated by the representation of Minority and Indigenous musics’ pentatonicism in Dvořák’s Ninth Symphony, Valkeapää expressed to Paakkunainen his desire to draw from the vast heritage of *juoiggus* in order to create a large-breadth symphonic work where two distinct “musical languages” would organically dialogue. This creative syncretic encounter eventually molded into the *Juoigansinfonija*, written for symphony orchestra with solo saxophone and *juoigi*. The symphony is structured into four movements with explicitly programmatic titles whose captionary and didactic nature is further reinforced in the album booklet: I. *Gumadii Galbmasit Skábma* (Polar Night Resounding With Cold) – II. *Humadii, Duoddarat Juige* (Drone, Yoik Of The Hills) – III. *Oappát, Vieljat Váimmustan, Biegga* (Sisters, Brothers, The Wind In My Heart) – IV. *Eallima áhpi* (The Ocean Of Life). These titles clearly concede how Sápmi landscape is the primary inspiration and expressive content of the composition. Throughout the symphony, around twenty *luodit* alternate, some joiked by the soloists, others rearranged for the instrumental ensemble. Together, the programmatic titles and *luodit* aims at the evocation of the Arctic landscape – already mirroring an eminent function of the *juoiggus* tradition.

The second movement is particularly effective in conveying this expressive duality, offering distinct layers and interpretive dimensions for both Sámi and non-Sámi audiences. This part of the composition consists of the solely instrumental performance of a single *luohti*, subjected to five variations that primarily involve orchestral timbre, accents and dynamics. The *luohti* in question is precisely an *adagio* interpretation of the *Biegga luohti* that Valkeapää had recorded two decades earlier in the album *Joikuja* (Figure 25) (Audio 5). The *luohti* forms entirely the thematic core of the movement and consists of a 16-bar period that maintains the aforementioned ABCB pattern, where B, in the symphonic piece, serves as a cadential resolution – a feature alien to the Sámi oral tradition, where *juoiggus* “has neither beginning nor end”, as Paakkunainen reiterates in the recording’s booklet drawing from Valkeapää’s teachings.



Figure 25 Staff notation transcription of the *Biegga luohti*, the thematic unit around which the second movement of the *Juoigansinfonija* develops.

But why, when describing other-than-human agencies in a more-than-musical context, do I bring up something as profoundly human-crafted as a symphony, the apex of a dominant written tradition and probably the ideal epitome of “music”?

According to the symphony program, the title of the second movement – as translated from Davvisámegiella in the album liner notes – suggests that the *juoiggalmas* of this *luohti* is the undulating landscape of the *duoddarat*, distinctive of the inland regions of Sápmi and home to Valkeapää. Nevertheless, as we already know from previous discussions, this *luohti* rather exhibits the morphology traditionally associated with *biegga*. Although the symphonic translation of this *luohti* displays considerable timbral variety and a relatively articulated harmony and counterpoint – principles that are largely foreign to *juoiggus* – *biegga luohti* is immediately recognizable in its morphology from the first bars of the movement, in its full exposition by the English horn. In fact, the piece asemantically retains a set of aesthetic-morphological norms that are readily recognized within the realm of *juoiggus*, and thus immediately decipherable by knowledgeable Sámi audiences, who are therefore invited to cross over the first interpretative layer – the one suggested by the movement’s title – and catch a deeper more-than-musical level, which the renowned Sámi writer Harald Gaski defines as a “secretive text” (Gaski 2013). While a non-Sámi-speaking listener uninformed of these norms might solely

picture a hilly landscape suggested by the English programmatic title, the traditional knowledge of Sápmi ecosystems, along with that of the aesthetic-morphological norms and ontology of *juoiggus*, allows Sámi audiences to enrich their aural experience of the movement through the immediate identification of the wind's voice within the orchestral variations. It appears only quite fittingly ironic that, in terms of compositional choices, the exposition of the wind *luohti* is entrusted solely to combinations of wind instruments.

Returning briefly to a previously mentioned linguistic point facilitates a deeper understanding of how the Sámi encode and decode the world through this creative sonic relationality. In Davvisámegiella, the term “yoik” in the title of the movement does not exist as such and in the sense that has since solidified within the historical-ethnographic literature. Today, this term is used nominatively to describe the vocal practice as a whole, the performative act as much as the object of this action, as a substitute for *luohti*, here intended in its solely musical dimension – as a rhythmic-melodic morphology (Weinstock 2012: 257). It is, however, a deverbal Anglicization of the expression *juoigat*, which is the infinitive form of a transitive verb in North Sámi that refers to the act of vocally expressing a specific *luohti* imbued with high evocative value. As has been previously noted in earlier examples, to say “x performs y's *luohti*” is equivalent to saying “x joiks y”. The term *juige* in the title of the second movement of the *Juoigansinfonija* is, therefore, the dual conjugation in the present indicative of the verb *juoigat*, where the *duoddarat* are the *juoigi*. Hence, it can be deduced that in the second syntactic unit the hills were joiking the wind – and for this reason what we hear is distinctively the *luohti* of *biegga*. The transitive function of “juige” supports the hypothesis that in this piece, the *duoddarat* are not the real *juoiggalmas* – as might be suggested by a negligent reading of the English movement's title – but rather the original performers. To more accurately reflect the meaning implied in the Sámi title, the English preposition “of” in the translation should lose its accusative function and instead be interpreted as indicating efficient cause. Transposed to the acoustic dimension, this interpretation resonates with the “organological” qualities of the landscape, where, as expressed by Aubinet earlier in this paragraph, the voice of the wind is sometimes an acousmatic sound event, perceptible only through the nature of the surface it brushes against. In this sense, it is reasonable to assume that by caressing the *duoddarat*, *biegga* causes them to resonate through the tones of its own *luohti*.¹⁵³ Returning, then, to the initial verse from Valkeapää, when the poet writes “ja duoddariid biekkat juige”, the direction of the action is unequivocal: it is the wind that joiks the hills.

Although *juoiggus* has been studied as a practice developed by humans within a specific cultural context, in the Sámi relational ontologies, the environment

¹⁵³ To reaffirm the validity of the hypothesis that the *luohti* is here not of human origins, it is curious to note how, only in this movement, the human voice is completely absent and the joiking is instead entrusted entirely to musical instruments, which – to some extent – are themselves other-than-human.

participates in this practice through a skillful interplay, whose immediacy often takes on wondrous and moving forms. In the Introduction, I described how – according to orality – the ability of *biegga* to joik made it an effective and unsuspected living and polyvocal archive, where *luodit* continued to be shared and passed on through environmental listening, out of reach from settler surveillance, thanks to the ability of the Sámi to hear melodies and receive kinships through thus sonic connections:

They kept yoiking – the ones who knew how to. In love, they yoiked the one they wanted. They knew it was not a sin. Earlier, they had not dared: Læstadius and Tuderus had strictly forbidden chanting. But even a Christian could not help yoiking once he got up on the fells. The fell yoiked, and the lake and the creek, the wind howled its troubles and it was impossible to live the way Tuderus and Læstadius had told them. Humbly, he first yoiked the wind, then the fell, and, feeling sad, thought about the powerful clergymen and their lack of judgment. How could they know what it meant to live on the tundra and chant the same yoik as the wind? (Lukkari 1967: 99)¹⁵⁴

Within this particular echosystemic knowledge that associate a more-than-musical animacy and agency to the wind, it becomes possible for a *juoigi* like Ánde Somby to encounter *biegga* on the rocky ridges of Sállir Island and joik the surrounding landscape together. The video of this fascinating musical exchange was recorded by Ánde himself using his mobile phone and posted on his personal Facebook profile, accompanied by the caption: “Moai biekkain juoigamen Sállira vuosttas gaskaijabeaivvija. ///Jeg og vinden joiker Kvaløya den første natta det er midnattsol. /// Me and the wind joiking Sállir Island the first night with the midnight sun”.¹⁵⁵ As *biegga* channels into the phone’s microphone capsule, it reveals all its *fápmu*, its powerful voice through varying degrees of intensity and sound saturation, which overlap with Ánde’s voice. The effect is a counterpoint between two *luodit*, the result of a symbolic musical and more-than-musical encounter between human and other-than-human, where the voice of the man and the voice of the wind come to speak the same language (cf. Janssønn 2024).¹⁵⁶

Bieggafápmu¹⁵⁷

In attempting to trace the echosystemic position of the wind within Sámi relational ontologies and histories of listening, it has been deemed necessary to adopt a posture of listening-with its biocultural agency, consulting *biegga* as an other-than-human subjectivity that inherits ethics equally applied to fellow humans, animals

¹⁵⁴ English translation by Kaija Anttonen in Hirvonen 2008: 130.

¹⁵⁵ The post was published on 17 May 2021:

<https://www.facebook.com/710985364/videos/10159426140260365/>

¹⁵⁶ Ánde Somby, Oral teaching (personal communication), May 19, 2021, Sirbmá, Sápmi.

¹⁵⁷ “Wind power”

and the land as a whole (cf. Somby 1995: 17). Through the case of *biegganjunni* and its propelling role in the specific ecosystem that follows the reindeer – which forms the thematic core of this dissertation – the value of *biegga* has also been recognized as a traditional resource that guides and cares for these animals as they traverse the tundra, ensuring their survival and access to nourishment. This commodification, however, does not proceed through objectification and subjugation, but rather approaches the wind as a force and resource to be entrusted, listened and honored as teacher and kin, in order to navigate the Arctic with caution, agility and respect.

Settler ontologies, much like those of the Sámi, also accord great power [*fápmu*] to the wind. However, driven by the insatiable resource rush across Fennoscandian and global policies, *bieggafápmu* [wind power] and the wind more broadly are viewed as resources to exploit, tame, extract and possess for the production of renewable energy and the creation of financial profit. In this context, the subjectivity of *biegga* is entirely disregarded in the decision-making process, as the wind is reduced to an abiotic atmospheric force, stripped of its voice and agency to breathe life into the Land. Concurrently, this ontological deafness leads to the neglect of the vast corpus of stories, *luodit*, sentiments and wisdoms carried by *biegga* and passed down since time immemorial, making it vulnerable to immense pressures brought by environmental and societal transformations.

While the rapid aggravation of the climate crisis catalyzes drastic changes in the environment – changes felt even more acutely in the Arctic (Post et al. 2019; Ulturgasheva, Bodenhorn 2022; Sámiradđi 2023) – the rush for renewable energy sources intended to mitigate the crisis adds yet another burden on Indigenous communities whose livelihoods, ecologies and economies are deeply interdependent with the Land. Subtle forms of (green) colonialism introduce unprecedented challenges for many Sámi families who still rely on subsistence practices that have evolved, been passed down and adapted over centuries, if not millennia, of ecosystemic co-existence with the environment. Their fierce resistance manifests both in the socio-political sphere, through acts of civil disobedience aimed at inviting consultation from decision-makers and raising global awareness about colonial injustices and human rights violations, and in the ecosystemic sphere, through the tireless celebration of the wind, rivers, mountains, and other landscapes under threat from relentless extractivism, expressed in the performance of *luodit* and sound art. Mirroring the principle of reciprocity within an ecosystemic network, Sámi artist Maret Anne Sara remarks «Det som skjer med landet, det skjer med oss».¹⁵⁸

¹⁵⁸ “What happens to the land, happens to us” (in SALT Art & Music website: <https://www.salted.no/art>)

Biegga millut¹⁵⁹

It is 23:59 on June 26, 2023. The midnight sun is just below the horizon, casting a reddish hue across the sky. The water of the indre Oslofjorden gently laps against the pier at Bjørvika, central Oslo. A steady pulse of club music pervades the low frequencies, while seabirds vocalize in the high range. Midnight strikes. A faint mechanical hum emerges from overhead, pervading the air around the pier. It is soon joined by a low, rhythmic whooshing that grows stronger and louder every cycle – an unsettled, at times violent sound, never before heard in the heart of the city. A series of screens set up on the rooftop of the SALT Art & Music cultural village, by the fjord, reveal the source of the sound. Footage of colossal turbines turning in the wind plays, captured from ground level, making the 117 m rotor diameter and the 87 m pillar seem even more colossal. The towering visuals amplify the impression of a louder, more pervasive sound. These are sounds and videos from the Fovsen Njaarke and Storheia wind farm facilities – two critical sites of Sámi resistance against human rights violations and the dispossession of reindeer herding landscapes.

With the audiovisual installation “Ššš” – a title of evident onomatopoeic derivation – Sámi artist Máret Ánne Sara, in collaboration with the Sámi artist network Dáiddadállu, creates a reversal of perspectives. For a few minutes, the citizens of the Norwegian capital city are called upon and, in a way, forced to listen-with the Sámi to the source of an Indigenous long-standing struggle: 277 wind turbines illegally established in the heart of their homeland:

For me, there is something mentally important in reversing the mechanisms and being able to invade back. Demanding space and forcing the majority – and society’s power – into a reality that one does not choose or naturally want. That’s what I often do with art and maybe that’s why I like to express myself as much as possible in public spaces (Sara in Daiddadallu 2023)

In 1978, Norway took a pioneering step by becoming the first country to ratify the ILO169 convention, recognizing the Indigenous status of the Sámi and committing to the safeguard of their identity and land rights. As early as 1988, the Norwegian Parliament further cemented this commitment by introducing a new section in the Constitution, stating that it is the duty of state authorities to ensure that the Sámi people can preserve and develop their language, culture and businesses. However, behind this paternalistic façade of progressivism, the Norwegian government continued its colonization of Sámi minds and lands (Kuhn 2020). Despite being descendants of the first human groups to settle in the region, the Sámi remain, as they have for centuries, «viewed as obstacles to governmental policies on large-scale mining, industrial forestry, hydro-electric, and windfarm construction» (Finbog et al. 2022: 11). In the past decade, such policies have been increasingly

¹⁵⁹ “Wind turbine”

justified as necessary measures within a “green certificate” scheme for the mitigation of climate change and the promotion of environmental sustainability through the development of clean energy (Fjellheim 2024). The mentioned omnipresence and powerful force of *biegga* across Sápmi – together with the scarce density of population and settlements interpreted under the colonial perspective of *terra nullius* – has made the region appear to settler economies as an ideal site for wind farm development (ibidem).

On October 11, 2021, the Norwegian Supreme Court declared the wind farm built on the Fovsen grazing district – where Sámi reindeer herders have had their traditional areas for reindeer husbandry – to be in violation of both national and international human rights, as it does not comply with the Article 27 of the International Covenant on Civil and Political Rights, which stands as «the most important international regulation to protect Saami rights to culture against encroachments on Saami reindeer herding lands in Norway» (Fjellheim 2024: 7):

In those States in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, in community with the other members of their group, to enjoy their own culture, to profess and practise their own religion, or to use their own language.¹⁶⁰

Seven large wind farms with a total of 277 wind turbines were constructed in Fovsen Njaarke, over areas traditionally used for reindeer grazing. Legal actions were taken by the local families of herders arguing that the industry would harm their ability to carry out reindeer husbandry, but before the legal system had decided anything, the Norwegian government granted licenses for the construction in 2010 (Fjellheim 2024: 1; cf. Olsen 2019). With the wind farm completed in 2020, the herders challenged the permits in Court and finally, after years of legal battles, the Norwegian Supreme Court ruled that the wind farms made it impossible for the herders to use the grazing land, declaring the licenses to build the farms invalid and the land used for reindeer grazing to be considered as lost. The Norwegian government, however, resisted taking the sole necessary action following the invalidation of the licenses, the

[t]otal removal of not only the wind turbines but also a complete restoration of the landscape by means of a meticulous new construction – or in this case rather deconstruction – work to repair the landscape to the fullest extent possible (Oestmoen 2023).

While wind power is widely celebrated as a renewable and emission-free energy source, its coexistence with traditional Sámi livelihoods, particularly reindeer herding, has proven to be highly problematic, even leading to fractures in activist

¹⁶⁰ <https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-civil-and-political-rights#:~:text=or%20other%20status,-.Article%2027,to%20use%20their%20own%20language.>

alliances between Indigenous and environmental groups (Kuhn 2020: 34). It is important to first highlight the relative nature of the supposedly low environmental impact of wind farms, contrasting the widespread belief that wind energy is inherently “green” due to its lack of direct greenhouse gas emissions. The construction footprint of such facilities involves significant land use, particularly through the excoriation or leveling of hilltops and promontories to provide the turbines with solid foundations of reinforced concrete (Sylte 2022; Fjellheim 2024). As Oestmoen points out, beyond the already detrimental effects of cementification wiping out hectares of lichen grounds and tundra habitats, a less immediate but equally destructive footprint on local ecosystems includes the large-scale fragmentation of critical reindeer herding environments due to the extensive infrastructure required for access roads, power substations and crane parking lots almost the size of a soccer field (Oestmoen 2023; cf. Lundqvist 2007; Gillingham et al. 2016). Additionally, the collision mortality of bird and insect species struck by turbine blades should neither go unobserved. Large birds of prey are particularly vulnerable, while migratory birds can also be affected if wind farms are built along migration routes, and local tundra bird face the same fate along with critical habitat disruption (Sámiraddi 2023). In colder climates like the Arctic, ice accumulation on turbine blades poses further risks to ground fauna when temperatures rise or the blades resume spinning, although most animals typically avoid the immediate vicinity of turbines (ibidem).

Wind farms like those illegitimately constructed in Fovsen Njaarke render vast acreages of land, vital for the reindeer and for reindeer husbandry, unsuitable for this ancestral co-existence. The presence of turbines and associated infrastructure disrupts the natural wandering behavior of reindeer, in turn posing existential threats to the traditional Sámi way of life and culture. The drastic impact of the wind industry on reindeer herding is well documented (Skarin et al. 2015; Skarin et al. 2018; Cambou et al. 2022). In addition to the already noted degradation and fragmentation of pastureland, the acoustic component plays a significant role and has received only limited attention (Skarin et al. 2018).

The sound generated by wind turbines is compound, often described as a combination of high- and low-frequencies. During a field recording expedition at the Havøygavlen wind farm, the day before the windy anecdote transcribed at the start of this chapter, I detected a sustained hum that filled the air around the entire promontory, audible even from a considerable distance (track n. 19 in *Muitalusat guldaleami birra*). Upon approaching a single turbine (Figure 10), I realized this hum was the result of two main events, namely the whooshing of the rotor blades rhythmically slicing through the air and the more subdued mechanical sound of the generators, which dominated the low-frequency range that tends to carry over longer distances (van Kamp, van den Berg 2017). Standing at the base of turbine T9, I could distinctly identify three primary sounds. The most intense was the repetitive swishing of the blades, which at such close range felt particularly

unsettling and intimidating. The second sound was the mechanical hum of the turbine's generator, which shifted in its droning tone as the gears changed. This latter mechanism coincides with the third and faintest sound, detectable only by placing my ear against the tower itself because otherwise masked by the overall loudness produced by the first two sounds (Figure 26).¹⁶¹ The blade whooshing produces a steady, pulsating rhythm that varies depending on wind speed, becoming sharper and more pronounced in higher winds. At a distance of approximately 400 meters, the compound sound of each turbine blends with the rest of the windfarm into a soft, continuous roar, resembling distant traffic or white noise.

Skarin et al. observed that reindeer in their study seemed to take long detours to avoid the continuous sound of wind turbines, operating day and night. They note that the turbines «seemed to have disturbed the reindeer in our study area more than the sudden sounds and increased human activity during construction work» (Skarin et al. 2018: 9912). Their analysis is premised by the similarity between human and reindeer hearing ranges (ibidem), and the suggestion that reindeer's hearing finely tuned to detect predators and perceive faint and long-distance sounds in the quietude of the tundra expanses. The increased noise levels from wind turbines appear to interfere with these abilities, potentially affecting their anti-predator behavior and even adverse communication between mothers and their calves (ibid: 9913). Stress caused by these loud and persistent unfamiliar sounds is also a key factor in the deviation of reindeer from their traditional migratory routes (NVE 2023). This outcome is not surprising, as my personal experience on the Havøygavlen promontory was already extremely unsettling despite my awareness of the cause of my aural disturbance (see above).

There are, however, additional factors to consider. As premised in the Introduction, research on sound that attempts to bridge anthropocentric cognition with more biocentric perceptions must decenter acoustics and listening as airborne processes – confined to interactions between voice and ear – and open to liminal spaces of sound communication that manifest as vibrations through non-airborne sources, which remain inherently more faint or even imperceptible to the notice of the human hearing (cf. Kanngieser et al. 2024). Just like the faint sound of gears changing, which asked for a specific cognitive posture at the bridge between touch and hearing, the vibrations induced by the generator and the movement of the rotor are transmitted through the ground via the turbine's pillar and base. Such non-airborne vibrations, for instance, have been found to produce tonal frequencies that attract fish and aquatic invertebrates off the coasts of the Norwegian Arctic (Popper et al. 2022; Cresci et al. 2023). Onshore, it is reasonable to assume that similar transmission occurs, though with different intensity and dispersion, since sound

¹⁶¹ I did geophonic and contact recordings this way, and these sounds are perceptible in the track no. 19 of *Muitahusat guldaleami birra*.

travels faster and with less energy loss – particularly at low frequencies – in water compared to air or ground. The impact of these vibrations on lichens and flora remains underexplored in current ecological studies, though low-frequency vibrations from wind turbines may alter soil properties or disrupt root systems in particularly sensitive ecosystems (Adhikari, Bhattacharya 2011; Velilla et al. 2021; Aksoy et al. 2023). To assess the perceptibility and dispersion of non-airborne sounds from wind turbines, I conducted a systematic sound survey of the soil surrounding the T9 turbine of the Havøygavlen wind farm. For this purpose, I used a sensitive omnidirectional geophone (frequency response: 10-1000+ Hz) adapted for field recording purposes that, originally designed for seismic measurements, can be connected to regular field recording equipment to capture subtle vibrations in various materials, including soil. The geophonic capsule was paired with recording equipment offering 32-bit depth and quiet preamps, ensuring more accurate sound reproduction and minimal digital noise, along with a broader dynamic range that allows the capture of both faint and loud sound sources. The geophone also features a threaded base that allows the screwing of an extended stainless-steel spike, which can be pierced in the ground to pick up deeper vibrations from the depth.

For the survey, I collected 1-minute-long samples at regular distances from the T9 turbine, mapping out a grid of 30 monitoring points arranged in concentric circles around the wind turbine. Although the recording device was not calibrated, the 32-bit float ensured that each sample could be normalized to a fixed level, allowing for the calculation of the real sound pressure levels (SPL) from the digital. The results show a noticeable dispersion of vibrations in the low-frequency range, with a particular resonance response at 55 Hz. These vibrations gradually decrease in intensity at monitoring points further from the turbine. This pattern is consistent with the spread of non-airborne sound vibrations transmitted from the turbine into the surrounding ground and soil (Figure 27) (Audio 6).

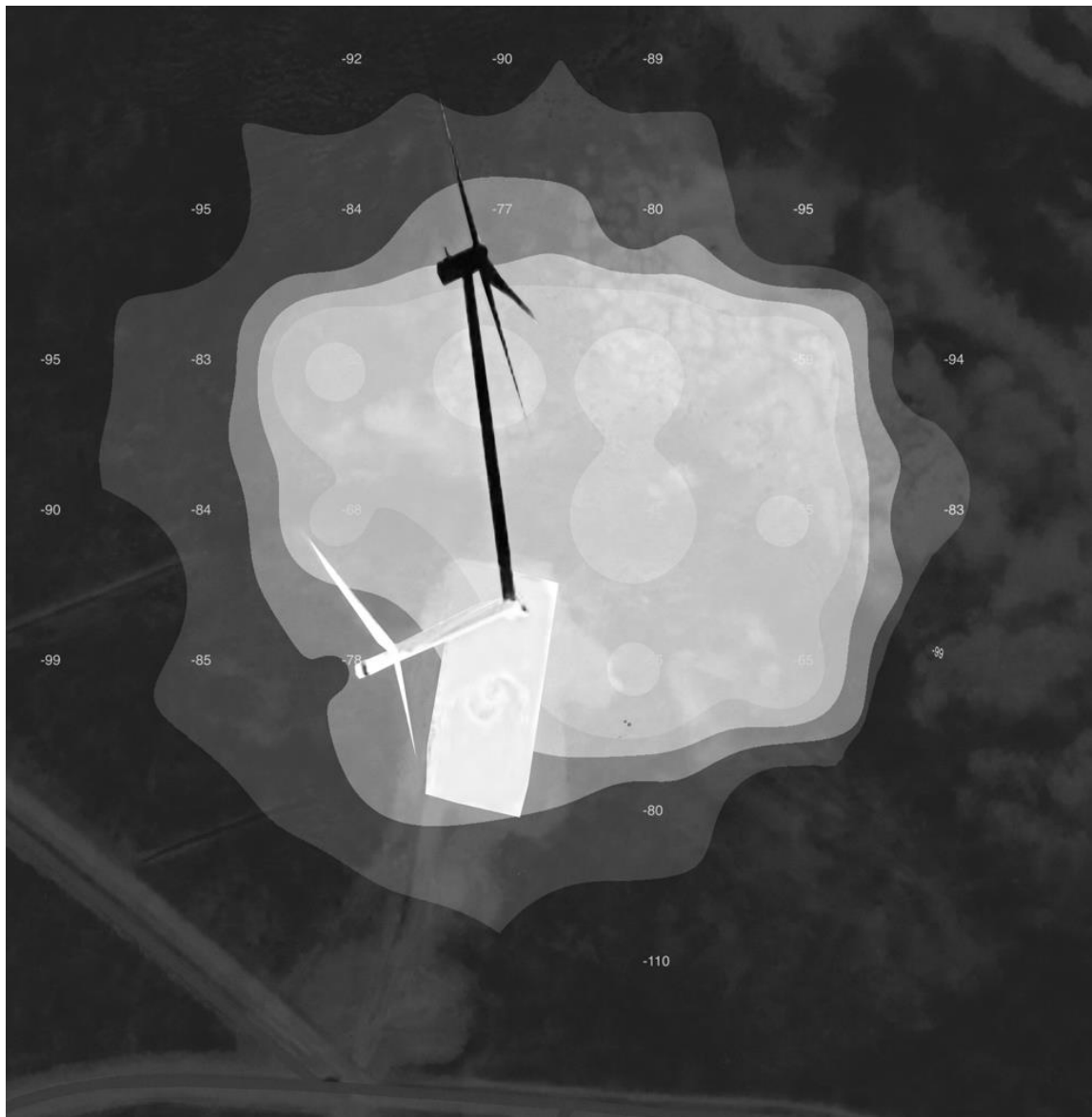


Figure 27 Overlay of a GIS Interpolation of the soil vibration dispersion surrounding the T9 turbine at Havøygavlen, over a satellite view of the turbine and its cemented base (QGIS). Brighter areas on the map indicate soil regions where the vibration dispersion is perceived to be louder, while darker regions show areas where the vibrations diminish in intensity. The SPL (Sound Pressure Level) parameters, derived from the recorded data, are displayed at the respective monitoring points, further highlighting the correlation between vibration intensity and proximity to the turbine.

These evaluations should take into account the perspectives of reindeer herders, who not only possess specialized knowledge of the land but also carry a sensitivity that tends the ear to typically unheard, threatened voices. As reindeer herder Haakon Issát aptly summarizes:

The turbines are labeled as “green” but they are not “green” at all for us. They lead to the devastation of mountains for the installation of wind industries on the lands where we have followed our reindeer and carried out our traditional activities for centuries. Those who herd reindeer know

that the wind guides the herd. But if something obstructs the natural migratory routes, the herd ends up scattering and probably lost.¹⁶²

Given that sustainability frameworks underlying the mitigation policies at the core of the Green Deal are often ineffective, if not harmful, to Indigenous livelihoods that have stewarded the Land for centuries, it is crucial that evaluations meaningfully consult and prioritize what matters to Indigenous stakeholders, whose ontologies of mutual engagement with other-than-human beings in a multispecies dialogue advocate for other Earth beings – including abiotic stakeholders like *biegga* – whose voices are still disregarded in their current practice. As the current President of the Norwegian Sámi parliament [*Sámediggí*], Silje Karine Muotka, resolutely expressed:

Herding is not a money industry. It's a way of life. It's cultural heritage, your family, your identity, your connection to the land. We have a saying in Saami – It takes a village to raise a kid. This includes taking responsibility for the relations between humans, reindeer, and the land (in Fjellheim, Carl 2020)

Undermining reindeer husbandry does not solely jeopardize this livelihood, but also deeply fractures Sámi identity and culture (Figure 28). Through her extensive engagement with reindeer herders in her work on *juoiggus*, Maj-Lis Skaltje concludes, reflecting the centrality of these animals within local ecosystems, that reindeer are the most valuable possession for the Sámi:

Go heajos jagit bohtet gal don oainnát, olbmui ii dat leat šat mokta. li leat mannan miela mielde, go boazu šaddá jápmit. Dat vuosttas surru boahťá olbmuide, go bohccot jápmet. Dieđát ii dat leat dego láddi, mas lea iežá kultuvra ollát.¹⁶³ (Skaltje 2005: 142)

This sentiment extends from the ecosystemic to the echosystemic dimension, where the sonic reciprocities between reindeer and wind is disrupted by the invasive hum of colossal wind farms, which dominate windswept ridges that have long served as transitional sites in the seasonal trails of the Rangifer. Mathis Eira expresses his concern over the alteration of this echosystem, which, as a reindeer herder, has provided him with a sense of belonging and safety since his childhood:

If anything happens where I can no longer hear the sounds of the reindeer, I feel like a part of that sense of home and comfort, a feeling of safety in me, would be lost. There are certain sounds – for example, the sound of wind turbines – that to me are annoying or even painful to hear because I know that they disturb the reindeer. And if they upset the reindeer they upset me too, and I can't build a good relation with that sound. It makes me uncomfortable, like I don't feel at home, and I'm not safe. So I try to avoid hearing those sounds, while on the other hand I

¹⁶² Håkon Isak Vars, Oral teaching (personal communication), March 4, 2023, Guovdageaidnu.

¹⁶³ “When there are bad grazing years, you see how people lose their vitality. Life loses its meaning when you see the reindeer die. People are filled with the greatest anxiety when the reindeer die. It's not the same as for the Swedes; they have a completely different culture.”

look for those sounds that make me feel comfortable and homely. Sounds with which I have set a good relationship, like the wind, or *ruovgamin* [reindeer grunt]. Some people today also build good relationship with the snowmobile, which has a very loud sound. But it supports the movement of the reindeer, unlike the noise of turbines.¹⁶⁴

To listen-with these histories of listening here reveals essential trajectories in the acknowledgement of the echosystems of Sápmi as biocultural heritage, meaning that the (human) cultural heritage is co-produced and equally shared with other-than-human beings, as well as safeguarded within a relational ontology of Earth communities on a living and sentient Land (Virtanen 2019). As much as Indigenous peoples, if not even more, other-than-human subjectivities – especially those labeled as abiotic – are too often denied self-determination over their own heritages (Nicholas, Smith, 2020: 131; Apaydin 2020: 6). In a later chapter of this dissertation, I delve further on the notion of soundscape conservation and heritagization from a non-anthropocentric standpoint on heritage that, listening-with Indigenous knowledge keepers, challenges dominant practices of conservation that rigidly dichotomize the realm of culture as independent from nature (Datta 2008). In the passage just mentioned from Mathis Eira it is possible to hear both aesthetic, ecological, socio-historical and political values behind each sound he mentions. This calls for a promotion of biocultural heritage in Indigenous terms (Virtanen 2019), where the community have a say in the sounds to preserve and the values and significations that these sounds carry. As much as they are aware, as the statement of Mathis demonstrates, of the sources that may threaten or disrupt the heritage, through sound masking, alienation or assimilation. To listen-with these histories of listening, ultimately, means to conduct a responsible consultation of needs that are historically marginalized, silenced or excluded from the dominant discourse on environmental sustainability and heritagization of both natural and cultural dimensions.

As of today, over three years following the Norwegian Supreme Court's ruling, the wind turbines in Fovsen remain operational and the Sámi continue to face and endure the repercussions and adverse effects resulting from this violation. For this reason, on February 25th, 2023, in occasion of the 500th day since the ruling of the Supreme Court, hundreds of Sámi gathered in front of Oslo's prominent centers of power to blockade the state. Such centers included the Department of Oil and Energy, the Department of Finance, the Parliament and the Royal Palace. Most of the actions involved sit-ins, regularly disrupted by police removing the activists blocking the governmental building entrances. Surrounding the blockades, a vast crowd of demonstrators created a loud and steady urban echosystem of rallying cries, chants and *luodit*. Beside these forms of direct political activism, other forms of interrogation of present times are contemplated by the Sámi, to dialogue with those very entities that the colonial Other threatens to silence. A *goavddis*

¹⁶⁴ Mathis Eira, Oral teaching (personal communication), June 20, 2023, Guovdageaidnu.

[ceremonial drums with role of mapping the biocultural geographies of a community] built and decorated in the early 80s by Sami journalist and activist Niillas Somby, partly together with his brother Ánde Somby, offer an apt example of this exercise.

The drum is «a political statement made during the Alta demonstrations». The life story of this object is, in fact, inextricably and intimately connected to the history of the Indigenous struggles and disputes against the construction of the huge Alta Kraftverk hydroelectric power station (1979-1987) on the Álttáeatnu [Alta River], in the Norwegian side of Sápmi (Figure 29). The Alta Powerplant threatened not only the balance of the local ecosystems, but also the Indigenous self-determination and rights on land, leading to the emergence of an Indigenous and international resistance movement to counter the threat.¹⁶⁵ The direct participation of Niillas and Ánde Somby to these struggles and the related experience of suffered violent coercion find direct visual translation on the membrane of the drum, which I analyzed together with Ánde. He first explains the Indigenous ontology of uses and functions of the *goavddis*:

The drum has traditionally been a sort of interface between the spiritual world and the everyday world. Somehow the spiritual world sends messages to the practical world through the movements of the *vuorbi*, a ring made from our sacred metal: brass. The *vuorbi* was traditionally put on the skin of the drum and when one used to beat the drum, the ring used to travel from figure to figure creating a sort of text. And then one has to interpret this “text” to know what the spirits are saying.¹⁶⁶

Niillas made a modern version of the drum where all the present threats are referenced to on its skin. The oracular question to its percussion was: “what will the spirits tell us about the events to come?” Niillas Somby drum represent, today, the oracle traditionally interrogated by the Sámi to learn whether some good or evil fortune is approaching them, in this particular case concerning the health and survival of the community in front of intertwined environmental and colonial crises (Renzi 2021a).

On the drum, there are symbols that are clear references to the construction works that happened on the Alta river: «[...] You can clearly see people standing united and the machines coming or going. It is a clear earmark of what was going around back then at Nullpunktet» where, at the end of 1979, a group of Sami and environmental activists organized a human chain to peacefully prevent access to the construction site.¹⁶⁷

¹⁶⁵ For an overview of events surrounding the Alta case, I refer to Somby (2000), Kuhn (2020) and Renzi (2022).

¹⁶⁶ Ánde Somby, Oral teaching (personal communication), June 11, 2021, Sirbmá, Sápmi.

¹⁶⁷ Ánde Somby, Oral teaching (personal communication), June 11, 2021, Sirbmá, Sápmi.

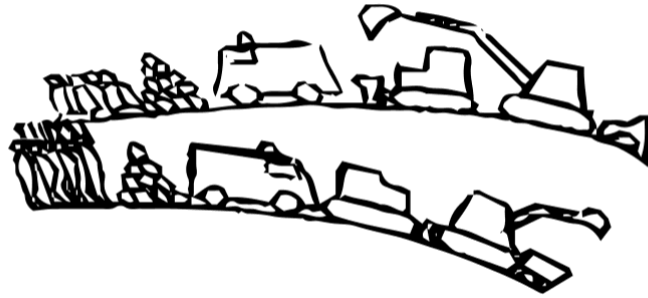


Figure 30 Digital scan from Niillas Somby's *goavddis*. The figure here hints at the blockade in Stilla.

The representation of the Nullpunktet is a clearly decipherable geo-historical event on the drum membrane, as it displays unmistakably visual affinities towards the archival photography of the human chain (Figure 30).

It is noteworthy, and in a way striking, how so many figures on Niillas drum are doubled or mirrored. This peculiar style refers to the ancestral figurative practice of representing the *saivo* (Renzi 2021a). The *saivo* is described as the upside-down underworld of the Sámi, reachable through bottomless lakes considered to be portals. In the *saivo*, everything appears to be the brighter mirror of what lives in the mirroring world. Some of the figures on the Niillas drum recall this figurative tradition, as well as the underlying cosmology and ecology. The sledge and the healthy river are mirrored by some of the present critical features of Sápmi landscape: the snowmobile and the poisoned streams (Figure 31a); as well as it is possible to discern two distinct types of architecture along the rivers: the *lávvu* and *goathi* dwellings on the healthy side, and some stylized houses along the unhealthy stream (Figure 31b).

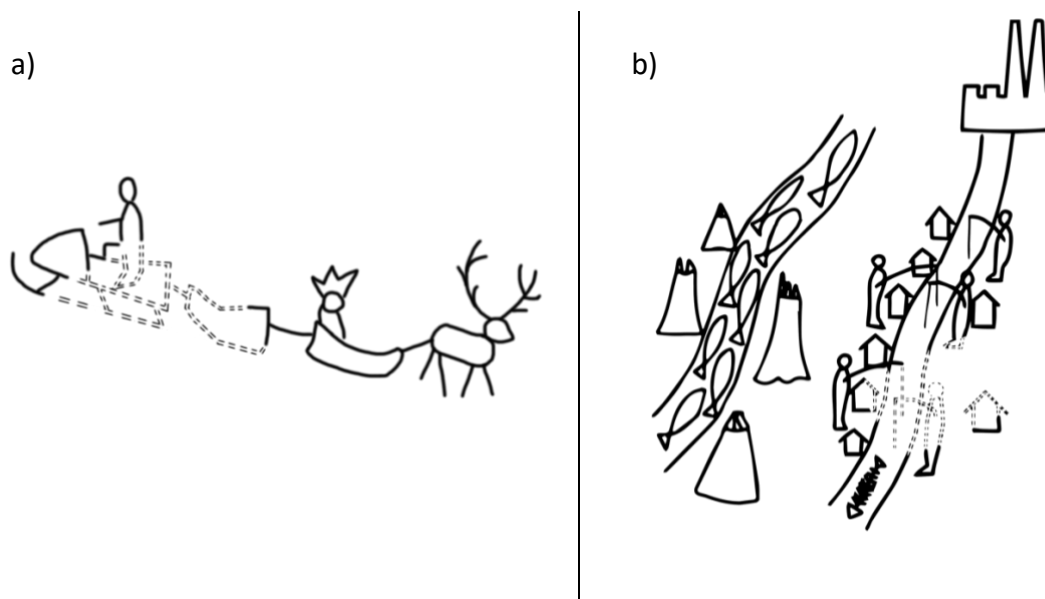


Figure 31 Digital scan from Niillas Somby's *goavddis*.

According to the oracular ontology of the *goavddis*, to which Ánde also refers, the dual nature of these elements allows the contemporary *noaiddit* to discern between the different ‘turns’ and challenges that the present seems to envision for the future of the Sámi in a rapidly changing world. Past and present times are consulted, compared, and re-interpreted through the oracular movement of the *vuorbi* on the drum figures. As Ánde resumes his description, contemporary issues emerge:

You can also see oil platforms in the Norwegian Sea, mining sites, and electric stations surrounding us. It is a kind of interpretation of those times. I guess if my brother made this drum today, perhaps there would be more wind turbines.¹⁶⁸

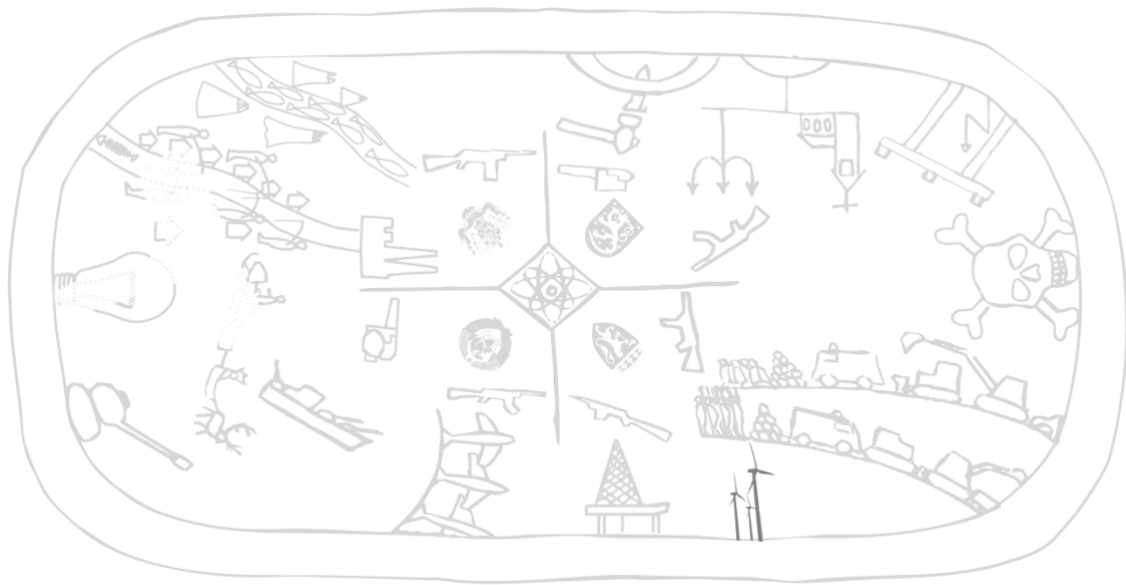


Figure 32 Digital scan of Niillas Somby’s drum with the hypothetic addition of the turbines to the current conflictual ecologies of Sápmi, as hinted by Ánde Somby.

Compared to other Indigenous peoples around the world, the Sámi’s socio-economic security appears relatively stabler due to their integration into the Nordic welfare model – as noted in the 2011 United Nations report (Anaya 2011: 5). However, it is crucial to emphasize that the well-being of the Sámi and of Sápmi is far from being guaranteed; the suffered processes caused by colonization are far from over; special Indigenous rights that refer to national and international agreements on land and self-determination are far from being fully respected by Norway, Sweden, Finland and Russia, especially when such violations are masked under “green” agendas. Niillas Somby drum has provided the Sámi with a tool to interrogate and interpret contemporary local and global challenges within a traditional frame of reference, confirming the idea of the *goavddis* as a cognitive map that allows the Sámi to better understand the world they are part of (Joy 2014; Renzi 2020, 2021a). It also contributes to the ongoing negotiation of the Indigeneity

¹⁶⁸ Ánde Somby, personal communication, Tromsø, June 11, 2021.

by transmitting ancestral ecologies and incorporating modernity into a shared interpretative framework which ensures the transmission of the ancestral and present indigenous knowledge.

More than forty years after its creation, Niillas' drum keeps reverberating with cosmological, ecological and historical significances, while also entering in dissonance with more recent political and social implications. It stands as a powerful testament to the Sámi remarkable ability to adapt their knowledge of the world to the challenges posed by local and global pressures. And an oracular question continues to be addressed to the drum:

“What will the spirits tell us about the state of the events to come?”¹⁶⁹

Biegga vilba¹⁷⁰

While, locally, the wind is commodified and disrupted by the green colonial agenda of the Nordic countries, these are not the only pressures to its integrity and, consequently, to its position within the reciprocities of the European Arctic ecosystems. In his *muitalus* shared for the audio-anthology in appendix to this dissertation (Appendix II.9), Áilu Valle centers the cognition of change through the act of listening-with the environment, suggesting that discerning variations in the voice of *biegga* offer crucial insights into the broader transformations in the rhythms of Eana:



*Na jos dal smiehtá go dál mun hálle
diená eanet ge diená konkrehkalaččat
juste daid jienaguin mat sámis leat
muhto das dego smiehtá diená nugo
ahte don guldat ge máinna nu earán
go don guldat dáinna, daid
beljiiguin, ahte don guldat gamuin
dahje dovdduiguin dahje diená ja, ja
dihto láhkai ahte dalle, dalle mun in
smiehta dan.
áiggi, dán áiggi, mun in smiehta daid
diená nugo sekunddan dahje diená
minuvttain dahje beaivin muhto diená
guhkit skalas dahje diená guhkit áigge
gaskal ja de diedusge dalle dat han
lea, dat guldaleapme lea dasto dat
ahte don gultat, don áiccat dan ahte
man láhkai dat luonddu ritmat rivdet
diená ahte diedus justte dál go mii*

So, if now I come to speak in
more concrete terms, specifically with
the sounds here in Sápmi, but
reflecting
on the way you are listening with
something other than what you are
used to do – not
just with your ears –, with your gut or
with your feelings, in a certain way
one does not think about time, one
stops thinking about time as seconds,
or as minutes, or as days.
I instead think on a much longer scale,
with so much more time in-between.
And of course, when you listen like
this then you hear, you notice how the
rhythms of nature are changing
right now, in this time we are
living in, where

¹⁶⁹ Ánde Somby, Oral teaching (personal communication), June 11, 2021, Sirbmá, Sápmi.

¹⁷⁰ “Wind, the cousin”

*eallit dán áiggis mas buot rievdá hui
jođánit, ja duon na ieš alddis dál dat
gal buktá fas dás, konkrehtalaččat lea
justte dat ahte dáppe bieggá hui
garrasit.*

*Dát ii leat diená, dat ii leat dábálaš
dat masa lea hárjánan ahte bieggá ná
olu ahte.*

*Dál ge geassit go mun fitnen jávrri
alde de leimmet doppe moadde ija de
dat iijat ge ledje diená ahte dat olles ija
biekkai nu gárrasit ahte illá bissu dat
tieltá doppe sajis ahte, dat lea hui
ártet, muhto nuppi dáfus dan ádde hui
bures ahte na dat lea maid mearka
das ahte man láhkai dat olles eana
dahje eatnanspábba lea dakkár dihto
láhkai dakkár eahpedássiidiettu dilis
ja mii lea dieđusge olbmui, olbmui
duon dáhkamuša čuovvumuš, de
duon.*

everything changes so rapidly.

So, now with that said, it brings me back here, concretely speaking about how is that the wind blows so strong here.

This is not normal; this is not what people are used to... it winds [*bieggá*] so much.

Now, in the summer I went to the lake.

We stayed there for a few nights, and those nights the wind blew all the time. It was so strong that the tent could barely stay in place. It felt very strange, but at the same time, it became clear that this is yet another sign of how the whole Earth, or the entire planet, is in such an unbalanced state.

And, of course, something like that is consequence of human action, there's that.¹⁷¹

In recent years, significant changes in the movement of air masses across the Arctic tundra have been recorded, largely due to the reduction in the temperature gradient between cold and warm currents (Käyhkö, Horstkotte 2017; Post et al. 2019; Ulturgasheva, Bodenhorn 2022; Sámiradđi 2023) Recent studies have identified the Fennoscandian tundra as one of the most impacted regions by high-wind events, which have often been overlooked in broader climate change studies. These changes pose a direct threat to the survival of lichen pastures and, consequently, to the entire ecosystem interconnected with the vulnerable reindeer husbandry (Käyhkö, Horstkotte 2017: 29-30). According to the Sámi Council's [*Sámiradđi*] report on climate change in Sápmi, «herders experience more and harder winds, especially during the snow-free season, compared to recent years», further underlying the deep interdependence between this subjectivity and the ecosystem that follows the reindeer. Asked about the differences between past and present weather patterns, many herders express growing concern and a sense of disorientation, as they find themselves unable to recognize the behavior of *biegga* – an entity they have long relied upon and deciphered through ecological knowledge and landscape practices passed down for generations. The concerns are tangible in the *muitalus* of Áilu Valle, as much as in the voices of Sámi elders and knowledge holders:

¹⁷¹ Valle 2024.

The weather has become much more unpredictable and extreme. It is always windy, and the wind is stronger¹⁷²

It's time to say goodbye to some elements we will never see again¹⁷³

“Who are these new winds? We don't know them, but we still try to welcome them¹⁷⁴

In other cases, their responses reflect a specialized understanding and reading of weather patterns and climate shifts:

Many say that the winds in the past were not as rough as they are nowadays. There are more southerly winds nowadays. The weather used to be much more stable and did not switch as fast as now. Even though there was a lot of snow, the cold made it *seakŋaš* (a snow condition with loose snow structure) in order for the grazing condition to still be good. In the winter of 2020 there were strong winds and heavy snow falls and mild weather. The 2021 fall-winter with strong wind threw down kilometres of the border fence between Norway and Finland, in several places. We have not experienced that before. Then there had been rain after snowfall, so the fence was maybe so iced up that strong winds actually threw it down (in Sámiraddi 2023: 88)

These passages increasingly underscore the inevitability of adapting ancestral knowledge to confront contemporary challenges, or alternatively, constructing new knowledge frameworks (Helander-Renvall 2004: 307). As an anonymous “reindeer herder in southern part of Sápmi” pragmatically reflects, «[i]f you are to see the positive in the strong winds: the wind dries the ground so that it is not saturated with water before the cold comes and freezes everything to ice» (Sámiraddi 2023: 88). At the same time, the vast environmental knowledge and landscape expertise of the Sámi can, and must, attract the attention of dominant scientific frameworks, bridging between onto-epistemological gaps that might help slow the unrelenting advance of climate change (Riseth et al. 2011: 12-13; cf. Vuojala-Magga et al. 2011). In the powerful words of fisherman, scholar and environmentalist leader Tero Mustonen, who closely collaborated with Sámi communities:

it is also time to build new knowledge. And this knowledge can only emerge through keeping strong connections with the traditional territory. We must be there on the land as it is changing, so that we can change with it (in Raygorodetsky 2013)

Factors that are alien and unfamiliar to ancestral ecologies, particularly the massive pressures imposed by the crises of our time, are increasingly making their way into the ecosystems of Sápmi, adapting their foundations to Indigenous acoustemologies and taking shape in *juoiggus*. This tradition continues to serve as an epistemological paradigm, allowing for the “naming” of such changes and

¹⁷² In Sámiraddi 2023.

¹⁷³ “Who are these new winds? We do not know them, but we still try to greet them.” (in Raygorodetsky 2013)

¹⁷⁴ “Who are these new winds? We do not know them, but we still try to greet them.” (ibidem).

encoding them within a familiar and recognizable system of values and reciprocities.

Through the *dajahus* of a poignant *luohti* that acknowledges *biegga* as close kin – *Biegga vilba* [Our cousin, the wind] – Ánde Somby celebrates this kinship recalling its vitality and ecological versatility throughout the polar year. In the final two verses, the *luohti* concludes with an invitation to keep celebrating *biegga* in this present more than ever – a time when the wind is increasingly threatened on multiple fronts, with an evident lyrical allusion to the wind energy conflicts previously discussed.¹⁷⁵ From this perspective, the Sámi listen-with the change and comprehend it by encoding it into the sonic network of *luodit*, and they encode it as a result of their deep involvement with and ability to adapt to shifting environments (cf. Ingold 1996: 25). In the contextual declination of a renewed passage by Steven Feld, it is not the *luodit* themselves that are most important, but the continuous interplay of inspiration, imitation and *in-vocation*, which sustains the more-than-musical flow between human and other-than-human voices.

<i>De geasi áigii</i>	In the summer
<i>Nu litnádít dat njávkkat</i>	So carefully he caressed
<i>Sámi máná muođu</i>	Sámi child's cheek
<i>Ja jiellahastá lieggasit</i>	And the breeze was so warm
<i>Ja čavzza áiggi fas</i>	And when autumn came
<i>Nu ollu doaimmat leat</i>	So many things to do
<i>De ferte čorget lasttaid maid</i>	Must clear all the leaves
<i>Mat duohkkot deikke leabbanan</i>	Which spread here and there
<i>De dálvvi áiggi fas</i>	In the wintertime
<i>Častas dudjot ferte</i>	May the hard snowdrift be shaped
<i>Ja ollu fámu čájethit</i>	Lots of effort have to be shown
<i>Olles vumiid njámastet</i>	Entire pastures entrapped in ice
<i>Go áigi gidđu fas</i>	Then spring came
<i>De dalle doaimmat fas</i>	With its spring chores
<i>Bárbmolottiid sáhhtašet</i>	Giving a ride to the migratory birds
<i>Ja geasi lieggas fievrridet</i>	Carrying the heat of summer
<i>Dan viššaleamosa</i>	The most hardworking
<i>Dan árjáleamosa</i>	The most yearned
<i>Biegga vilbba juoiggadet</i>	Let's joik our cousin the wind
<i>Gean millus ferte beastelet</i>	We must rescue him from the mills

¹⁷⁵ The performance and *dajahus* of the joik “Biegga vilba” are accessible at <https://www.youtube.com/watch?v=SRkXKLNaKqs&t=79s> (last accessed: 29 October 2024).

ČUOIKA



Here comes Rukses Bealjít

Govddaluovttafávli, Guovdageaidnu

July 9, 2023, 20.35

I halted my steps. The stagnant waters of Govddaluovttafávli lay about fifty meters ahead, shimmering faintly in the distance. Beneath my boots, the mossy soil was saturated, occasionally seeping up around my soles. An exceptionally gentle breeze whispered through the birch leaves, and a clear sky allowed the sun to warm the surroundings to over 25°C. I recall thinking that if I were a mosquito, this would certainly be the place I would choose to spend my time. All the more so if an unexpected warm-blooded creature were to offer itself as a sacrifice for the swarm's feast. With this thought, I secured the tripod with the omni A-B microphones in a more stable area of the soft terrain, then took another recorder equipped with a binaural set and began to move away, ensuring that the rubbing sound of my mosquito-proof fabric attire would not interfere excessively with both recordings. From a distance of around 40 meters, I could now see the tripod standing amidst the low tundra vegetation. Now it was my turn to set up. Binaural headset on. Recorder rolling. "For science!", I shouted in my head with a hint of epic grandeur, as I proceeded to wake up the entire mosquito squadron reigning over that bog. It did not take long before a cloud of dipterans rose from the mossy terrain, obscuring my horizon. Confident in my technical clothing and the net covering my face, I allowed myself to be enveloped by the swarm. Soon enough, I could no longer hear the solitary *bižus* (*Pluvialis apricaria*) that had been circling around me since the moment I arrived. The in-ear monitor was only intensifying the buzzing of the hundreds of mosquitoes eager to feast on my ears. Amplified by the recorder, their shrill sound was piercing my eardrums, and I could soon acknowledge why, four centuries ago, Francesco Negri evoked the idiom *lanciette sonanti* (tiny sounding-spears) to describe this small but fierce insect. To tell the truth, I soon realized that not only was the piercing sensation an acoustic experience, but some insects had managed to reach my flesh, thanks to the clips of my binaural set, which held the mosquito net too close to my face and ears. After only two minutes of recording, the swarm had gathered enough courage to attempt piercing through the thickness of my gloves and jacket. Successfully. I felt like *sisteduodji*, being stitched by thousands of needles. Occasionally, I allowed myself a small movement to scratch or blow some mosquitoes away from my visor net. But as I remained still, trying to shift my focus from the pain and itching to the recording I was making, I began to reflect on what Mai Britt Utsi had told me last fall. She mentioned that if one stops and listens carefully to the buzzing of mosquitoes, one can hear a melody within it. Another teaching – again from a Sámi friend, Ánde Somby – came to mind: mosquitoes are like tiny, winged musicians. When we attend a music concert, we generally pay a small fee for the ticket, offering some money to support the music artists create for us. With mosquitoes, one could say something similar, except the price in this case is a small drop of blood, paid to listen to their music. With this renewed point-of-listening in my mind and an unusual philosophy holding my mind and body up, I tried to remain still, appreciating the joiking that the mosquitoes were performing in my ears. Somehow, it must have worked, as this time I managed to remain motionless for slightly more than five minutes. I considered that a big

success. I stayed in Govddaluovttafávli to nourish the local mosquitoes and record their “voices” for a total time of 45 minutes. Then I collected my equipment, now covered with insects attracted to the heat emanating from the batteries [Figure 33], and began to walk back to the car, extremely satisfied with the recordings, which I could not wait to review with Mai Britt and Ánde at our next meeting.

Vuolle Máze, Máze

July 10, 2023, 17.45

Today I paid a visit to Johan Sara Jr. in Máze. The early summer fishing had been fruitful for him, and he had invited me to share in the bounty of his catch. I could already savor it as I waited outside his door. Immediately, as he received me, I noticed that his expression was different from the welcoming smile he had greeted me with on previous visits to his home. He held a playful smirk as he squinted, carefully observing something not distant from my face. Confused and slightly embarrassed, I scratched my ears. They were still itching like mad. “You’ve been out there, haven’t you?” he broke the ice, his smirk growing more amused. He invited me inside, and before I could even remove my shoes, he made me turn toward the mirror in his entranceway. It was in that moment I realized that my ears were a deep crimson. Johan Sara’s smirk broke into a heartfelt laugh, to which I could only join in at the ridiculous sight. I said that, yes, I had recently been “out there” recording mosquitoes. I showed him the video of me wearing the binaural set with hundreds of those *sounding spears* targeting my ears and told him, “This must have been it!” We laughed again. But then, suddenly, he grew more serious and, almost with a tone of admonishment, said, “You must be careful when you do such things. If the people in town see you with such red ears, they’ll start gossiping, and every time they see you, they’ll say, ‘Oh, here comes Rukses Bealjít [Red Ears]. It’s obvious he’s been out there, all day, recording *čuoikkat*. He’s done it again, Rukses Bealjít”. His admonishing tone gave way to another hearty laugh, which I could not resist being swept up in. It was then that I noticed, beside the mirror, Johan had hung a glass frame containing hundreds, if not more, of mosquito corpses arranged artistically in concentric patterns.

In Sápmi, the mosquito (*Diptera: Culicidae*) is an inevitable and eternal summer companion. Its arrival is inexorable, its ubiquitous presence is a constant in the daily life of both people and animals, resigned to its pervasive persistence in the dizzying air of the Arctic summer. During my stay in Guovdageaidnu, I witnessed the first lone mosquito of the year on April 9th, only two days after the first annual rainfall and despite the daytime temperature still lingering around -2°C with an abundant 40cm of snow and ice on the ground, far from melting (Figure 34). However, it is when mosquitoes start assembling in swarms and consistently attacking their warm-blooded victims that this insect signals the end of *giddageassi* – the season bridging between spring and summer – and marks the beginning of the proper summer (*geassi*; Eira 2011: 39).

On the midsummer night of June 24th, mosquitoes awake altogether and tremendously hungry. To quote a traditional Sámi saying, “if they did not arrive before [June 24], on that night they come with two sticks”, a metaphor that Johan Sara Jr. explained to me in terms of the marks that mosquitoes leave on one’s skin «just as hikers leave marks on the ground or snow when walking with their two walking sticks».¹⁷⁶ I could perfectly see what Johan meant just by staring at my hands and forearms on the evening of that 9th of July, after coming home from the recording session in the Govddaluovttafávli bog (Figure 35).

If I were to respond to Wright’s critical question on self-erasure from field-recording materials, “What am I not hearing in the recording?” (2022: 26), I might argue that self-erasure from the recording made that evening was not solely «guided by the myth of noninvasive, low-impact fieldwork» or motivated by concerns of fidelity towards an undisturbed echosystem, as heard beyond anthropic presence (ibid: 27). Anyone who confronted such an embodied experience with midges and mosquitoes in the *meahcci* can comprehend just how *noisy* my *non-self* could have been in those moments edited out while assembling the soundscape composition ‘Čuoika’ – track no. 5 in *Muitalusat guldaleami birra* (Norum et al. 2021: 424; cf. Wright 2022: 31).¹⁷⁷ After all, the proboscis of Sámi *čuoikkat* is practically designed to pierce the thicker, tougher skin of a reindeer. With all my yelling and cursing edited out, I was finally able to share the results with Mai Britt Utsi during our following recording session.

As we listened together with all that buzzing, she commented:



MB: I think there is a philosophy behind that... The mosquito coming, arriving, and taking so much place in people’s lives. So, have you been out there recording them?

NR: Yeah... I was there sacrificing myself, recording them with microphones in my ears, to capture as you’d perceive them. I was standing still, letting them bite me, sting me.

MB: Do you hear a melody when you hear them?¹⁷⁸

I was about to respond that – while immersed in that droning sound – I did recall her advice from the previous autumn, when Mai Britt broke the silence with a murmur that clearly hinted at the whining of a mosquito. It quickly became clear to my ears that the vocalization was not just an indistinct hum mimicking the sound

¹⁷⁶ Johan Sara Jr., oral teaching (personal communication), April 29, 2021, Máze, Sápmi.

¹⁷⁷ The reference here is to Acerbi, who writes: «Come io mi dibattessi, come menassi e mani e piedi, lo lascio concepire a chi può farsi una giusta idea del flagello, sotto cui mi trovava» [“As to how I struggled, how I flailed with both hands and feet, I shall leave it to the imagination of those who can form a proper idea of the scourge under which I found myself.”] (Acerbi 2016: 145-146)

¹⁷⁸ Utsi 2024.

of the insect. Instead, it seamlessly revealed as something that I could immediately recognize, for I was not just hearing the unmistakable sound of mosquitoes, but I was hearing their *luohti*.

In the following pages, I build on Sámi storytelling – as part of ecological knowledge and landscape practices – to answer the provocative question that stemmed from my conversation with Mai Britt: How musical is mosquito? The chapter opens with a reconstruction of the sonic entanglements in the human history of this highly underrepresented yet ever-present insect. Soon it unfolds as a dialectical trial around this tiny, infamous insect, whose ubiquitous presence is a constant in the lives of both people and animals throughout the Arctic summer. The mosquito stands trial for its existence, charged by dominant ontologies with being an “insignificant pest”, a “natural enemy” and an “unbearable nuisance”. By collating written accounts of sonic events in selected travelogues, the first subchapter presents the testimonies of the “prosecutors”, informed by four written accounts from travelers who, between the 17th and the 20th century, traversed the Arctic regions of Europe during the summer season. These accounts present diverse histories of listening *to* the mosquito, but they uniformly mirror a dominant acoustemology that, over millennia, has fossilized the buzzing of this insect as one of the few most undesirable sounds produced in nature.

The section is methodologically grounded in Paola Dessì’s (2010) theory of the “sonic event,” understood as a “historical event” – an acoustic experience that, while ephemeral in its physical manifestation, possesses a documentable and interpretable historical dimension. According to Dessì’s definition, this type of event is not limited to the sound itself but encompasses a set of circumstances, functions, purposes, emotions, judgments and memories associated with it. The sound becomes one of many components of a broader historical context – and history of listening – which can be reconstructed through sources such as, in this case, written accounts, even when the acoustic event itself has faded away (cf. Hoegaerts 2021; Mansell 2021). In defense of the mosquito, four Sámi “advocates” provide – in the second subchapter – counter-testimonies informed by histories of listening *with* the mosquito. Through distinct, multi-modal stories, the advocates not only advance an ecological understanding of the mosquito as central to the balance of the Arctic echosystem – chiefly in driving herds towards highland pastures – but also an acoustemology that challenges hegemonic auralities. The more-than-musical consultation of the mosquito as both *juoiggalmas* and *juoigi* contributes to reframe this insect as kin rather than foe within local echosystems, overturning the three major charges advanced by the prosecutors. Lastly, the more-than-musical study of mosquitoes and their ecological role in the Arctic emphasize how the voice of such a *radical* other-than-human being can inspire a paradigm shift across disciplines, providing affective, ethical and sustainable alternatives to understanding and acknowledging voices beyond the human.

Prosecutors

Lusimus, Octavi, gracili modulante Thalia
atque ut araneoli tenuem formavimus orsum.
lusimus: haec propter Culicis sint carmina dicta,
omnis ut historiae per ludum consonet ordo
notitiae. doctrina, vaces licet: invidus absit.
quisquis erit culpare iocos Musamque paratus,
pondere vel Culicis levior famaue feretur.
posterius graviores sono tibi Musa loquetur
nostra, dabunt cum securos mihi tempora fructus,
*ut tibi digna tuo poliantur carmina sensu.*¹⁷⁹

Virgil 1918: 370 (vv. 1-10)

Despite the verses of the poem *Culex* – attributed to Virgil – encourage even the most reluctant reader to be mindful of the signals this tiny creature communicates to the human ear, over the millennia, the sound of the mosquito has maintained its reputation as nature's most notorious nuisance.¹⁸⁰ This perception is confirmed in the eleventh book of the *Naturalis Historia*, where Gaius Plinius Secundus asks pointedly where has «implanted that sharp shrill voice of the creature, so utterly disproportioned to the smallness of its body?».¹⁸¹ Certainly, this strident whine is not the result of air being forcefully expelled through the insect's anus,¹⁸² as

¹⁷⁹ “Mere play, Octavius! yet these lines receive, / Such filmy lines as feeble spiders weave; / Throughout my lay let fair Thalia smile, / And tuneful verse th' unwilling ear beguile. / A simple Gnat commands the poet's song, / And humble strains to humble themes belong. / Ye, who would blame my rustic Muse, beware, / These envious loads my Gnat can never bear; / In some fair day, when plenty gilds my field, / And blooming summers certain harvests yield, / In bolder notes my Muse her voice shall rear, / Such notes as Cæsar need not blush to hear” (*The Culex of Virgil*, with a Translation into English Verse by Lucius Manlius Sargent, Etc. Lat. & Eng, Emerald Press, by Belcher and Armstrong, 1807: 23)

¹⁸⁰ For a quick disambiguation regarding the attribution of the poem *Culex*, refer to Fraenkel (1952).

¹⁸¹ Pliny the Elder 1855. The original passage in Latin reads: «ubi vero truculentam illam et portione maximam vocem ingeneravit?» (Pliny the Elder 1906: Liber XI, chapter 1, paragraph 2).

¹⁸² The original passage reads: «ἔφασκεν εἶναι τοῦντερον τῆς ἐμπίδος / στενόν: διὰ λεπτοῦ δ' ὄντος αὐτοῦ τὴν πνοὴν / βίᾳ βαδίζειν εὐθὺ τοῦρροπυγίου: / ἔπειτα κοῖλον πρὸς στενῶ προσκειμένον / τὸν πρωκτὸν ἡχεῖν ὑπὸ βίας τοῦ πνεύματος» (Aristophanes 1907, Cloud 133: vv. 160-164). The same passage has met the following translation in English: «Disciple: Chaerephon the Sphettian asked him whether he thought gnats buzzed through the mouth or the breech. / Strepsiades: What, then, did he say about the gnat? / Dis.: He said the intestine of the gnat was narrow and that the wind went forcibly through it, being slender, straight to the breech; and then that the rump, being hollow where it is adjacent to the narrow part, resounded through the violence of the wind» (Aristophanes 1853)

Strepsiades comically learns from Socratic teaching, exclaiming: “The rump of the gnats, then, is a trumpet!”¹⁸³

Regardless of the unfortunate association between the sound of mosquitoes and a flatulence, it is worth noting how this sound takes on an unexpectedly musical quality when rhetorically related to the well-known aerophone. The metaphorical association between the sound of a mosquito and that of a trumpet is a common *trope* that trades the acoustemological narrative behind this insect from antiquity into modernity. An exemplary passage is found in Tertullian, who refers to mosquitoes as «tubam et lanceam» (*adv. Marc.* 1, 14, 1; Evans 1972: 36). Similarly, in an allegorical poem to Queen Elizabeth I written by the British poet Edmund Spenser in 1596, the author likens a group of troublesome locals attempting to expel two noble knights from the Queen’s castle to «swarme of Gnats» with «murmuring small trompetts sownden wide» (*The Faerie Queene*, Book II, Canto IX, vv. 136, 138).

No, mosquitoes are not trumpets (HS 423). At best, to properly invoke the Hornbostel-Sachs classification of musical instruments, they are interruptive free aerophones (HS 412.22; Guizzi 2012)¹⁸⁴ as the answer to the fatidic question raised by Pliny the Elder lies, in fact, in the fast, continuous rotational motion of their wings, which fends the air at such a frequency that generates a more or less steady tone around 300–600 cycles per second (Arthur 2014).

To put it in Augustinian terms, «even the most diminutive insect cannot be considered attentively without astonishment».¹⁸⁵ Before falling into «one of the most recognizable and aggravating sounds on earth for 190 million years» (Winegard 2019: 7), the buzzing hum of a mosquito exhibits a remarkable ability of «exquisitely engineered organisms» (Hall, Tamir 2022: 7). If one attempts to dissociate the sense of discomfort and irritation that accompanies this sound, it becomes evident that mosquitoes are not only accomplished *musicians* with underappreciated sonic qualities, but also skilled *listeners*. In fact, these dipterans are «endowed with one of the most sensitive sound detectors in the insect kingdom, the Johnston’s organ», a mechanosensitive organ apt at detecting even the faintest sound wave, allowing «a flying mosquito to detect the tones produced by the wingbeats of other flying mosquitoes and distinguish these from tones produced by its own wings» (Hawkes, Hopkins 2022: 21).¹⁸⁶ These acoustic skills and

¹⁸³ The original passage reads: «σάλπιγξ ὁ πρωκτός ἐστιν ἄρα τῶν ἐμπίδων» (Aristophanes 1907, Cloud 133: v. 165).

¹⁸⁴ This organological analogy emerged from a conversation with Nico Staiti (29 August 2024, Bologna, Italy).

¹⁸⁵ «Sed in qualibet minutissima muscula bene consideranti stuporem mentis ingerat [...]» (Agostino DCD 22.24, Bettenson, *Ibid.*, 1072)

¹⁸⁶ The wingbeat frequency of male mosquitoes hovers around 600 Hz, while that of females typically ranges between 300 Hz and 550 Hz, with the lower frequency occurring when they are bigger or engorged (Becker et al. 2020: 21-22; Spielman, D’Antonio 2001: 22; Arthur 2014). Yet, when male and female mosquitoes mate, they match frequencies – and, more interestingly, they do so not at their fundamental wingbeat frequencies but at an extraordinary harmonic near 1200 Hz, a frequency

sensitivities are determinant factors in swarm formation (Spielman, D’Antonio 2001: 23; Attanasi et al. 2014) and, particularly, for mating rituals, during which male and female mosquitoes pair by matching the frequencies of each other’s wingbeats «during flight, producing a harmonious duet in a prelude to mating» (Hawkes, Hopkins 2022: 21; see also Arthur 2014; Menda et al. 2019; Hoy 2024: 25). Drawing once more on Augustine of Hippo’s meditations,

Quis dedit aculeum culici, quo sanguinem sugat? Quam tenuis fistula est qua sorbet! Quis disposuit ista? quis fecit ista? Expavescis in minimis; lauda magnum.¹⁸⁷

Curiously enough, in this passage where he praises in wonder the morphological attributes of a mosquito, Augustine seems to forget its aforementioned sound qualities, which are rather pronounced as follows:

Nam et culicis nomine non absurde figuratur seditiosus homicida, quia hoc animal et *strepando inquietat* et sanguine delectatur.¹⁸⁸

And again, as plague and symbol of the restlessness with which the Holy Spirit torments the violent and the proud:

Sicut autem conciliatus et placatus Spiritus Sanctus requiem praestat mitibus et humilibus corde, ita contrarius et adversus immites ac superbos inquietudine exagitat. Quam inquietudinem muscae illae brevissimae significaverunt, sub quibus magi Pharaonis defecerunt, dicentes: Digitus Dei est hic (Ep. 55,16.29).¹⁸⁹

that lies outside the typical auditory range of both sexes, as noted by neurobiologist Ronald Hoy: «How in the world are they duetting where they can’t be hearing?» (Cornell University 2009; cf. Hoy 2024: 25). Additionally, the pitch of a mosquito’s sound is proportional to its size—smaller mosquitoes produce higher-pitched sounds, while larger ones, such as female mosquitoes, generate lower frequencies due to their larger wings, which beat fewer times per minute during flight (Spielman, D’Antonio 2001; Becker et al. 2020).

¹⁸⁷ Augustinus, *In Psalmum 148 enarratio*: 10. “Deus omnia gubernat”. The English translation reads: “Who gave its sting to the gnat, for it to suck blood with? How narrow is the pipe whereby it sucks! Who arranged all this? Who made all this? You are amazed at the smallest things; praise Him that is great” in Tweed, J. E., 1888, *From Nicene and Post-Nicene Fathers* (First Series, Vol. 8, Edited by Philip Schaff), Buffalo, NY, Christian Literature Publishing Co.

¹⁸⁸ My emphasis. Augustinus Hipponensis, *Quaestionum Evangeliorum libri duo*, I.35: [1329](#); Quaest. Ev. 1.35: “For even under the name of the gnat, the seditious murderer is fittingly symbolized, because this creature both disturbs with its buzzing and delights in blood”.

¹⁸⁹ “And just as the Holy Spirit, when benevolent and appeased, grants peace to the meek and humble of heart, so too, when is opposed and hostile, afflicts the violent and the proud with unrest. The symbol of such unrest were the gnats, by which the magicians of Pharaoh, tormented and overcome, lost their power and confessed: Here is the finger of God!”

Non si possono sopportar queste lanciette sonanti (Francesco Negri)¹⁹⁰

It is undeniable that, aside from a few rare and scarce narratives that offer kinder and more dignified representations of this dipteran,¹⁹¹ listening positionalities in the West have dictated and immortalized a largely fixed and enduring acoustemology of the mosquito as an *undesirable* natural sound. This perspective has grown so canonical in literature that when the unsuspecting Francesco Negri reached the northernmost expanses of Fennoscandia in the middle of the summer, overwhelmed by the pervasiveness of mosquito swarms he dusted off a Latinism encountered a few paragraphs earlier:¹⁹²

io in viaggiando tengo in continuo moto una mano per difendermi da sì importuni animaletti [...] E però in riguardo del proprio discomodo, e di quello de' rangiferi particolarmente, i quali non possono sopportar queste lanciette sonanti per denominarle così con S. Agostino, che scrive: *culicis vel tubam vel lanceam*, eleggono la maggior parte di loro di abbandonare il paese; e nel mese di giugno passano i monti, ed arrivano vicino al mare, dove il vento marino, e la privazione dell'acque stagnanti discaccia quella maledizione, ò pure si trattengono nella sommità de' monti, che sempre abbondano di neve, e sono senza Zenzale. (Negri 1700: 31)¹⁹³

As Paola Dessì has already noted, among the assortment of sound events recorded by the Italian explorer in his letters, the buzzing of the mosquito is the only one that, rather than coming as an original interpretation, references texts from Christian

¹⁹⁰ “One cannot endure the stings of these sounding spears”. Francesco Negri (1623–1698) was a priest and explorer, recognized as the first Italian to travel across Scandinavia and the first foreigner to reach the North Cape. His journey, lasting three years (1663–1666), is recounted in his travelogue *Viaggio settentrionale* (1700). Negri’s travels were primarily driven by religious motives, with the goal of revealing the effects of Divine Providence even in “distant” and “desert” lands. He observed that Providence had arranged Scandinavia such that «where the fruits of the earth are lacking [...] there the abundance of mines is provided» (1700: 75).

¹⁹¹ A well-known passage in Thoreau’s *Walden* exemplifies this seldom sentiment, where the metaphor of the mosquito as a trumpet is also vividly recalled: «Morning brings back the heroic ages. I was as much affected by the faint hum of a mosquito making its invisible and unimaginable tour through my apartment at earliest dawn, when I was sitting with door and windows open, as I could be by any trumpet that ever sang of fame. It was Homer’s requiem; itself an Iliad and Odyssey in the air, singing its own wrath and wanderings. There was something cosmical about it; a standing advertisement, till forbidden, of the everlasting vigor and fertility of the world» (Thoreau 1854: 96).

¹⁹² Norum observes that «the pervasive presence of mosquitoes in Lapland’s stretches may come as a surprise for those unfamiliar with the region» (Norum et al. 2021: 417). The same was true for Francesco Negri, who traveled to the European Arctic when knowledge of the region was still largely vague. In his *Lettera I*, Negri writes: «per l’eccedente freddo si crederebbe che non ce ne fosse pur una» [For the excessive cold, one would believe that there was not a single one to be found] (Negri 1700: 31).

¹⁹³ “While traveling, I find myself constantly in motion, waving my hand to ward off those vexatious little creatures. Indeed, for the sake of one’s own comfort, and especially that of the reindeer, who cannot endure the stings of these sounding spears – those very same which Saint Augustine, in his writings, aptly referred to as: *culicis vel tubam vel lanceam* – most creatures choose to abandon these lands. In the month of June, they traverse the mountains and make their way toward the sea, where the maritime winds and absence of stagnant waters drive away this accursed plague. Others retreat to the lofty mountain peaks, ever laden with snow, where the gnats are blissfully absent.”

Latin literature (Dessi 2016: 12). While Negri does allude to the canonical aesthetic associated with this sound, he mistakenly invokes Augustine when referring to these insects as *lanciette sonanti*, an analogy that rather derives from the aforementioned apologetic work of Tertullian, who describes mosquitoes as trumpets with spears (*culicis et tubam et lanceam*). Nonetheless, the Augustinian sense of wonder is not absent when Negri encounters swarms so dense that they almost obscure the sun.¹⁹⁴ The devout admiration of nature that permeates each of the letters compiled in the *Viaggio Settentrionale*, however, takes on less exuberant tones whenever this relentless insect makes an appearance. Only the nighttime hours offered a transitory respite from such tenacious nuisance (Negri 1700: 31).¹⁹⁵

Veils and gloves could give us no protection against their singing in our ears (Giuseppe Acerbi)¹⁹⁶

Giuseppe Acerbi, who traveled a similar route more than a century later during an exceptionally hot summer, did not share however the same view:¹⁹⁷

Though it was now drawing towards midnight, the torment we suffered from the musquetocs, instead of being abated was increased. The night was perfectly calm, and the insects attracted by the effluvia of our Laplanders, pursued us in our course, surrounded us, and involved us as in a cloud. [...] We began to make preparations for passing the night [in Pepojovaivi], and the Laplanders set about cooking their supper. The musquetoes this night annoyed us so terribly, that it was not without the

¹⁹⁴ The original text reads: «Tutta l'estate l'aria v'è piena di mosche e zenzale in tanta quantità, che, quasi dissi, coprono il sole» [Throughout the summer, the air is so thick with flies and gnats that one might say they nearly obscure the sun] (Negri 1700: 2). A similar passage, later in the account: «Queste zenzale dunque ed altri più piccoli moscini, in tempo d'estate, sono qui in tanta copia, che n'è ripiena l'aria, ed è quasi impossibile il durarla» [These gnats, along with even smaller flies, swarm in such abundance during the summer months that the very air is filled with them, making it well-nigh unbearable to endure] (Negri 1700: 31).

¹⁹⁵ The original text reads: «Al presente però non mi ricordo, che mi dessero tal molestia la notte, o nel tempo equivalente alla notte, nel quale riposano gli uomini, e così gli uccelli ed altri animali» [Yet, I do not recall them troubling me during the night—or at that time which passes for night, when men take their rest, as do the birds and other creatures] (Negri 1700: 31).

¹⁹⁶ Giuseppe Acerbi (1773–1846) was an explorer, musician, archaeologist, naturalist and diplomat. At 25, he became the first foreign explorer to reach the North Cape by land during his 1798–1799 expedition across Fennoscandia although, oblivious of Negri's travel, claimed to be the first to reach that latitude. The overland route facilitated encounters with diverse Arctic biomes and Indigenous communities from both inland and coastal regions. Acerbi meticulously gathered vivid impressions from the expedition and published them in a travel-memoir complemented by illustrations and musical scores. His dual sensibility as a naturalist and composer distinctively surfaces in the text through a vast documentation of Arctic soundscapes and performances of joik – the ancestral Sámi vocal tradition. While Acerbi dismissed the latter of any musical value, «the only musical accents to be heard are those [...] with which birds make the woods echo [...]; that of the winds resounding amidst tree branches [...]; that of the majestic fall of rivers over rugged rocks» (Acerbi 1802: 67). His travelogue was published in England in 1802 with the title *Travels through Sweden, Finland and Lapland, to the North Cape in the Years 1798 and 1799*. An incomplete Italian edition of his travelogue was published much later, in 1832.

¹⁹⁷ Acerbi recorded temperatures reaching peaks of 29 degrees Celsius in the shade (45 degrees exposed to the sun) during the day and a minimum of 19 degrees at midnight on July 1, 1799 – temperatures comparable to those observed today (Acerbi 1802b: 28, 47).

utmost difficulty we were able to swallow a morsel of victuals. [...] We were obliged to eat with gloves on; and at every morsel we put into our mouths we were under the necessity of drawing aside the veils that covered our faces [...]. In spite of all our precautions the musquetoos were sometimes swallowed together with our viands. In order to be quit of so disgusting a fauce, we were compelled at each morsel we put into our mouths, to draw near the fire, and thrust our heads into the rising column of smoke. We chose rather to encounter all the bad effects of the smoke, and to be half suffocated, than to swallow those pestiferous animals (Acerbi 1802b: 50-51).

If Negri observed the pervasiveness of mosquitoes in the Arctic environment and rendered it into few concise but descriptive images, Acerbi's account transforms this physical pervasiveness into a genuine ethnographic obsession. Mosquitoes are featured in an extensive amount of log entries, almost every day fueling outbursts in which the author expresses his frustration and even discouragement about advancing in his overland journey to the North Cape. The obsession of Acerbi with mosquitoes is such that even when these are absent, his thoughts inevitably turn to the delight of being freed from their incessant torment:

The three days we passed on this island were spent delightfully [...] without the least interruption from the musquetoos, which, fortunately, had been driven off the island by the violent wind (ibid: 39).

The acoustic experience of these «eternal tormentors» (ibid: 85) is a major factor underlying Acerbi's sense of discouragement even more so than the irritation caused by their stings, which he was often able to shield against:

Those insects, which are the scourge of that country, became indeed very troublesome to us; and our gauze veils and gloves could give us no protection against their singing in our ears, and interrupting our sleep. Here our own resolution, as that of our servants formerly, for the first time, began to be shaken (ibid: 5).

It is notable how, in this instance, Acerbi chooses the term “singing”. Although this term is not unfamiliar in the lexicon of ethology, particularly in ornithology (Martinelli 2011: 154; cf. Feld 1982; Rothenberg 2005; Taylor 2017), what stands out in Acerbi's usage is the absence of the highly derogatory descriptors he typically associates with this pest, instead opting for a term that infers the nuisance posed by the sound of mosquitoes solely as a hindrance to sleep. While “singing” usually refers to forms of musical communication and often carries an aesthetic judgment, in this context, that judgment is conspicuously absent. The association of the act of singing with the buzzing of mosquitoes becomes an even more notable lexical choice when contrasted with passages where Acerbi invokes his musical training to dismiss the musicality of *juoiggus*, refusing to grant this eagerly anticipated vocal tradition the very same term “singing” – this time backing his wording with manifest aesthetic and superficial judgments (Boero 2010: 232):

We desired to hear them sing, being anxious to have a specimen of their skill in music. I attempted several times, both by the power of money and of brandy, to make the pastoral Laplander utter his notes, that I might form to myself, if possible, some idea of their music: but the utmost I could accomplish was to extort from them some hideous cries, during the continuance of which I was sometimes obliged to stop my ears with my fingers. It is scarcely credible, though it is perfectly true, that the mountain and wandering Laplanders have not the least idea of any thing connected with harmony, and that they are absolutely incapable of an enjoyment which nature has not entirely forbidden to any other tribe or nation, as far as I have been informed. (Acerbi 1802b: 66-67)

And comparably, a few passages later where he describes ritual performances of *juoiggus*:

The *juoige*, or song of incantation, is used by the Noaaid whilst in the exercise of his magical function. To say it is sung, is to give an imperfect idea of the magician's manner of delivering it, which he does in the most hideous kind of yelling that can be conceived. (Acerbi 1802b: 311)

While these lines certainly insinuate a dehumanizing narrative towards the Sámi and their cultural expressions, associating the verb “singing” to the mosquito does not amount to a genuine humanization of the insect, nor does it reflect a respective more-than-human musicking that by contrast emerges metaphorically through other descriptions of the natural soundscapes of the Arctic in the same travelogue (ibid: 67). All the more so because this instance, though noteworthy, stands alone against a broader and more established use of the term that distinctively frames the sound of mosquitoes:

If the wind happen to blow briskly, they disappear for the time; but no sooner is the wind laid, than they return with their usual buzzing, and crowd every place. (Acerbi 1802b: 180)¹⁹⁸

The naturalist wonder and collector's attitude reveal an undeniable curiosity that Acerbi harbored for the entire Arctic entomofauna, including a species of warble flies (*Hypoderma tarandi*) that he portrays also as a plague for both animals and people, nonetheless collecting «those insects and their eggs, intending them as presents for [his] entomological friends» (Acerbi 1802b: 108). Only the tiny but fierce mosquito seems to fall outside this sentiment of marvel and scientific enrichment¹⁹⁹ – as an insignificant, bothersome and undesired non-human being –

¹⁹⁸ It is curious how the Italian edition of this text presents expressions that reinforce an even more tempered and “bugged” attitude. The same passage reads: «Fuggono questi crudeli nemici di ogni vivente, se un vento viene a soffiare con forza; ma cessato appena, ritornano con un ronzio fastidiosissimo esso solo» [These cruel foes of all living creatures flee in haste should a strong wind begin to blow; but the moment it ceases, they return with an unbearably irritating buzz, and that alone] (Acerbi 2016: 207)

¹⁹⁹ No representation of any species of mosquitoes in the entomological plates despite mentioning three species in the previous table (Acerbi 1802b: 253-255)

in spite of unintentionally taking on a loud protagonist role throughout the narration of the whole journey to the North Cape.

Un coro più feroce di Caligola (Paolo Mantegazza)²⁰⁰

As a result, in the second half of the 19th century, Paolo Mantegazza arrived at the Arctic Circle forewarned by the obsession of those who had preceded him about this infamous dipteran. In his own travelogue, he promptly acknowledges mosquitoes as «the first plague of a journey through Lapland» (Mantegazza 1881: 85).²⁰¹ With a hint of reluctancy, he describes two of the species encountered in the region:

Non parlo delle zanzare [...], una mi sembra essere eguale alla nostra; e soltanto un po' più grulla, perché si lascia ammazzare molto facilmente. L'altra è più piccina, ma molto velenosa e ti vola in branchi innumerevoli nel naso, nella bocca e negli occhi, in modo da toglierti il respiro e da accecarti (ibidem).²⁰²

Learning from the reports of Acerbi and Negri, Mantegazza also sought relief in the blowing of the wind or through artifices refined by the Sámi to limit the bugging activity of swarms. These included the repellent action of thick smoke – which Acerbi described as «an object of great luxury in this part of the world» (Acerbi 1802b: 5) – and the application of tar and fish oil on the skin to prevent bites (Mantegazza 1881: 85; see also Acerbi 1802b: 34; Loschi 1935: 152).²⁰³ No

²⁰⁰ “A choir more ferocious than Caligula”. Paolo Mantegazza (1831–1910) was an Italian anthropologist, physician and professor of pathology at the University of Pavia before becoming the first professor of Anthropology in Italy at the University of Florence (1869–1910). There, he founded and directed the Museum of Anthropology, the journal *Archivio per l'Antropologia e l'Etnologia*, and the Italian Society of Anthropology. Though his writings, Mantegazza emerges as a strong proponent and defender of positivism, Darwinism and evolutionary thought in the name of scientific progress. In 1879, at age 48, he journeyed to Scandinavia with his colleague and friend Stefano Sommier, primarily to conduct anthropometric studies on the Sámi. Equipped with advanced photographic and craniometric instruments, he documented around 100 Sámi individuals later published in *Studi antropologici sui Lapponi* (1880), which included detailed photographs and data tables. In his travelogue *Un viaggio in Lapponia coll'amico Stephen Sommier*, published in 1881, the narrative around the Sámi is a perfect exemplification of the myth of the Noble savage where, although considered “an inferior people” in evolutionary terms, the Sámi are approached by Mantegazza with an objectifying compassion, describing them as “good people” deserving benevolence rather than contempt.

²⁰¹ In the original, «la prima peste di un viaggio lapponico».

²⁰² “I shall refrain from speaking of the mosquitoes, for one seems much the same as our own, though somewhat more foolish, as it allows itself to be killed with great ease. The other, however, is smaller, yet far more venomous, and flies about in countless swarms into your nose, mouth, and eyes, so much so that it robs you of breath and blinds you entirely”. In Acerbi's travelogues he reported a list of insects encountered in the Arctic summer, among which it is possible to read also *Culex Pipiens*, *Culex Pulicaris* and *Culex Reptans* with the note: «The air swarms with them, when the weather is fine» (Acerbi 1802b: 252). Notably, despite Acerbi's mention of three mosquito species in the preceding table, no representation of any of these species appears in the entomological plates of the text (Acerbi 1802b: 253–255).

²⁰³ «Per fortuna non ti tormentano né a tutte l'ore, né in tutti i tempi; quando tira vento e fa freddo, scompaiono. Io avevo adoperato il barbaro metodo di difesa dei lapponi, dipingendomi il volto con catrame sciolto nell'olio di pesce, ma benché mi fossi ridotto un mostro, non trovai che il rimedio fosse troppo efficace» [Fortunately, they do not torment you at all hours, nor in all seasons; when

expedient, however, could eliminate the constant, almost despotic, sonic presence of the insect. For instance, during a short break in the locality of Joganjálbmi (Elvebakken), the meal was entirely «accompanied by a choir of mosquitoes more ferocious than Caligula, and more numerous than the grains of sand in the sea» (Mantegazza 1881: 78-79).²⁰⁴

That mosquitoes are considered singing creatures in Sápmi is something Mantegazza was aware of during his journey. During his bibliographic reconnaissance of Sámi poetry, he came across several collections of *dajahusat*, notably including the poem of a mosquito *luohti* transcribed in Swedish by South Sámi priest Anders Fjellner (1795-1876), from Härjedaelie (Härjedalen). According to this *dajahus*, a grasshopper interrogates a mosquito about what she does during the summer. The mosquito replies that she sings (“Io canto”, in Mantegazza; “Jag sjunger”, in Fjellner’s transcription) and asks the grasshopper the same question, to which the grasshopper responds that she dances to the music created by the mosquito.²⁰⁵ Although Mantegazza’s translation is included within the pages of his account without any commentary to support or question the musicality of the insect from his point of view, the only dance he performed in the presence of these “pestiferous” creatures was a choreography of hopping, swatting and flailing – a “swatting dance”, to use an idiom from Norum et al. (2021: 424) – that his predecessors also knew well (see also Acerbi 1881: 91).

Not only are mosquitoes once again portrayed as persistent and ferocious *singers*, but Mantegazza’s depiction even appears to accord them a certain degree of musical organization. The use of the term “choir” in the episode mentioned above, however, is evidently not intended to suggest multipart singing skills on the part of the mosquitoes but is more likely descriptive of the swarm’s ability to combine their sonic resources to taunt the Italian traveler and his party (cfr. Martinelli 2011: 155). Certainly, this interpretation of the strenuous *choral* activity of mosquitoes clarifies the (not so) enigmatic identity of the “minor beasts” that kept Mantegazza and his team awake throughout the night spent in Sállir (Kvaløya):

fu solamente dopo, che seppi che eravamo stati quindici *cristiani* (compreso io) a dormire in quella *gamme*, con un numero corrispondente di cani (delle altre bestie *minori* che non dormivano, ma

the wind blows and the cold sets in, they vanish. I had employed the barbarous method of the Laplanders, smearing my face with tar dissolved in fish oil, but though I had reduced myself to a monstrous appearance, I did not find the remedy to be particularly effective] (Mantegazza 1881: 85)
²⁰⁴ Original: «tutto accompagnato da un coro di zanzare più feroci di Caligola, più numerose delle arene del mare. Io però era felice, non dovendo più dire: *diem peridi!*»

²⁰⁵ Mantegazza 1881: 222. In Mantegazza, the *dajahus* reads as follows: “La cavalletta domanda alla zanzara: / – Che cosa fai tu durante l’estate? / – Io canto; ma che cosa fai tu stessa / – Io ballo.”. The Swedish transcription, riportata da Düben, recita: «Gräshoppan frågar myggan: “Hvad gör du om sommaren?” “Jag sjunger”, svarar myggan; “men hvad gör du sjelf?” – “Jo”, svarar gräshoppan, “jag dansar till din musik”». (Düben 1873: 346). It is likely that in the original Sámi *dajahus*, the verb translated to Swedish as *sjunger* (to sing) is actually the Sámi verb for the act of joiking (see below).

furono molto *attive* tutta la notte, sarebbe difficile il valutare il numero, anche approssimativamente).²⁰⁶ (Mantegazza 1881: 99)

Gli sbattitori di porte sono più uggiosi delle zanzare (Maria Albertina Loschi)²⁰⁷

An acoustic nuisance to the natural silence and quietude of the North is the acoustemology that also transpires from the travel narrative compiled by Maria Albertina Loschi in her journey across the Finnish side of Sápmi, where «time passes in a state of tranquil contemplation, serenely restful [...], when our tiny winged and stinging foes are absent» (Loschi 1935: 145).²⁰⁸ Similarly to the previously mentioned cases, in Loschi's account, the sound of the mosquito is rendered through musical terminology ('notes') combined with derogatory adjectives ('stinging') that emphasize the undesirability of this sonic event:

La natura qui è un po' selvaggia, ma appare lieta e mite nello splendore di questa calda estate. Non manca la nota.... pungente, qualche zanzarina indiscreta. (ibid: 100)²⁰⁹

The most compelling aspect of Loschi's account, however, lies in a comparison that well illustrates the ongoing transformations in the soundscape of the European Arctic region. At the turn of the twentieth century, this region experienced the rapid

²⁰⁶ "It was only later that I came to know we had been fifteen Christians (myself included) who slept in that gamme, accompanied by an equal number of dogs (as for the smaller creatures, which did not sleep but were most active throughout the night, it would be quite difficult to estimate their number, even approximately)"

²⁰⁷ "Door-slamers are more tiresome than mosquitoes". Maria Albertina Loschi (c. 1890–1981) was a journalist of noble origins with a strong advocacy for women's right to work. She began her career after obtaining a diploma in languages, which she leveraged to become a public speaker and successful propagandist. Her knowledge of multiple languages enabled her to promote international perspectives, representing Italy abroad. Despite numerous travels, however, Loschi's only complete travelogue is *Itinerari Finlandesi*, published in 1935 to commemorate the centenary of the Kalevala. There she offers a comprehensive view of Finland's history, from ancient times through its recent independence and economic growth, reflecting Italy's strategic interest in Finland during the fascist era. In the travelogue's second part, Loschi describes her journey from Helsinki to Finnish Lapland, illustrating the Arctic Highway route northward. Unlike the journeys of early Italian explorers, Loschi's travel occurred in a time when the Arctic was becoming a destination of fervid tourism. Her travelogue is therefore contextual to a time of rapid urbanization and emergence of technophonies like cars and trains, and the silent qualities of the Arctic are romanticized as a relief and escape from the frenziness of the city, «where vehicles do not deafen you with the irritating symphony of horns and sirens» (Loschi 1935: 42), and «No crowds, no noise – what a relief! It feels as if one is enveloped by a 'divine green silence'» (Loschi 1935: 60). Loschi's vision of the North remains one of romanticized remoteness, a place «possessing a singular charm – woven of silence and solitude – that exerts a mysterious allure» (Loschi 1935: 136-137).

²⁰⁸ The original passage reads: «Anche nel silenzio della notte chiara – quando non vi sono le nostre piccole nemiche alate e punzecchianti – il tempo trascorre in una contemplazione tranquilla, serenamente riposante». Similarly, a few passages before: «Che silenzio in questa sperduta stazioncina di Nuojua! Non ci siamo che noi e.... i moscerini» [Ah, what silence in this remote little station of Nuojua! There is no one here but us and... the midges] (Loschi 1935: 106).

²⁰⁹ "The nature here is somewhat untamed, yet it presents itself as cheerful and mild in the brilliance of this warm summer. However, there is never a lack of a certain... stinging note, an occasional indiscreet little mosquito."

incursion of a novel and challenging-to-regulate source of nuisance which more than any mosquito, according to Loschi, disrupts not only the alleged myth of Nordic silence but a broader sense of quietude at every latitude:

Fortunatamente una primavera precoce e calda seguita da un periodo di piogge, ci risparmia oggi il tormento delle famose zanzare lapponi — zanzare non pericolose dal punto di vista infettivo, ma pare terribilmente numerose e fastidiose, specie nelle zone più basse. In ogni modo, però, le finestre degli alberghi sono sempre protette da fitte reti metalliche e si dormirebbe tanto bene, se.... esistesse un inesorabile accordo internazionale contro i disturbatori screanzati, contro gli sbattitori di porte più uggiosi delle zanzare (queste almeno si riesce qualche volta ad amazzarle....) e, ahimè!, pullulanti a tutte le latitudini una lega possente contro tutti i rumori inutili, un codice insomma della cortesia turistica e del silenzio alberghiero.... (ibid: 137)²¹⁰

From the travelogues presented in the previous paragraphs, a pattern of three major declinations of mosquitoes in Sápmi can be discerned. In the first place, mosquitoes are portrayed as massively pervasive during the Arctic summer yet deemed *insignificant* and not worthy of thorough ecological attention in comparison to other elements of the environment. Once the initial exotic fascination with their pervasiveness fades, these insects are quickly assimilated into the more familiar category of pests tormenting people worldwide and their literary presence emerges as a mere frustrating distraction to the journey, hurriedly fended off or swatted away. However, it is precisely through these experiences of frustration and discouragement that one can trace one of the most significant impacts this tiny insect has left on the history of Sápmi: its role in deterring settlers from the land. Acerbi had been warned before undertaking his journey northwards, though he did not fully understand the reasons for such a warning...

This journey appeared to every body at Uleåborg chimerical, and a project that would be found impracticable on experiment. Every person of our acquaintance pictured Lapland to us in the most frightful colours: they assured us from authorities [missionaries and merchants] true; or supposed to be true, that in summer it was absolutely impossible [...] to pass from one place to another. (Acerbi 1802a: 324)

²¹⁰ “Fortunately, an early and warm spring followed by a period of rains spares us today the torment of the infamous Lappish mosquitoes – mosquitoes that, though not dangerous from an infectious standpoint, are said to be terribly numerous and bothersome, especially in the lower lands. In any case, however, the windows of the hotels are always protected by dense wire screens, and one would sleep so well, if only... there existed an inexorable international accord against those ill-mannered disturbers, against the door-slamers more tiresome than mosquitoes (those, at least, one manages to kill on occasion...), and alas! teeming at all latitudes. A powerful league against all unnecessary noise, a code, in short, of tourist courtesy and hotel silence....”; Similar parallels between the overwhelming presence of mosquitoes and that of tourists can also be found in Dana (2003: 15) and Valtonen et al. (2020).

...until he encountered himself the magnitude of the obstacle this insect posed for his expedition and that of other settlers venturing into the region during the summer season:

The pleasure which is expected to be enjoyed during the summer, after a tedious winter that lasts from Michaelmas to July, as the good missionary observes, is entirely marred by these troublesome flies. (Acerbi 1802b: 181)

To fully understand how over centuries the colonial expansion in the European Arctic has proved particularly challenging and suffered, it is crucial to look beyond just the social and economic factors – thoroughly and long-examined by historians – and recognize concurrent other-than-human agencies that have only recently emerged in historiography (cfr. McNeill: 2010: 3). Among these factors, one often-overlooked yet decisive actor is the mosquito. As Winegard notes, few species on the planet have had as direct and profound an influence on the lives of so many human beings, and yet its role in human history «has been written off as a sidelined spectator» (Winegard 2019: 3). In the case of Sápmi, while there is no disease-bearing component at stake towards humans, the ubiquity of this insect exhausted missionaries, travellers, settlers, and more recently, tourists to the point of becoming a symbol of Sámi anti-colonial resistance (Valkeapää 1971 [1983]: 51, 53). This is humorously captured in souvenir magnets sold at the Sámi museum in Kárášjohka, where a stylized picture of a mosquito is captioned as “Sámi Airforce” – a playful reference to their significant role as defenders of Sámi lands (see also Palomaki 1993: 5) (Figure 36).²¹¹

This belligerent analogy seems to be further amplified by the sentence «We are at war with the mosquito», which opens Winegard’s monography on the human history of «our deadliest predator» (Winegard 2019: 1).²¹² It is not my task nor desire to dwell on the historical impact of mosquitoes as disease vectors – since those species are not present at the latitudes this dissertation covers.²¹³ However,

²¹¹ I showed this magnet to some fieldwork collaborators from Guovdageaidnu, and they argued that the true Sámi Airforce is actually made of the mosquitoes from their area. Apparently, there is an ongoing and long-standing dispute over this, dating back to Mantegazza’s account, where he humorously reports local accounts on the relative ferocity of the Guovdageaidnu mosquitoes: «Dicono che le pecore in questa regione sono ridotte dalle zanzare a pelle ed ossa» [They say the sheep in this region have been reduced to skin and bones by the relentless torment of mosquitoes.] (Mantegazza 1881: 86)

²¹² This assertion—also reinforced in D’Antonio and Spielman (2001) and much of the literature on mosquitoes—arises from a common misconception where humans are perceived as the primary prey of mosquitoes. In reality, mosquitoes themselves pose no real danger; the true threat comes from other organisms, such as sporozoites—the protozoa responsible for malaria – of which the *Anopheles* mosquito is merely a vector, transmitting the disease to humans (Martinelli 2010: 131; Hall, Tamir 2022: 5). And even through this complicity, less than 3% of the mosquito species we know are vectors for human disease-causing pathogens (Yee 2022; Hall, Tamir 2022: 10).

²¹³ An extensive historical study on the role of mosquitoes as disease vectors in shaping colonialism and imperialism is provided by McNeill, who focuses specifically on the colonial history of the Greater Caribbean and the Global South (McNeill 2010). Similar analysis that places the mosquito at the center of the historical discourse have been carried by Mitchell (2003) and Winegard (2019).

despite no microbiological war is being waged, conflicts with mosquitoes are likewise ostensibly attested by foreigners in Sápmi, as the second major declination of this insect lets emerge throughout the considered travelogues in terms of a *natural enemy* to both people and “any other warm-blooded beast” (Mantegazza 1881: 150). Negri explicitly fabricates this antagonistic relationship as a battle that the Sámi have to endure each summer, inevitably losing and being «violently forced to leave their villages for the months in which mosquitoes are more active» (Negri 1700: 30).²¹⁴ Analogous narratives persist throughout the travelogues regarding the relationship between mosquitoes and reindeer, with the former portrayed as so hostile that the latter are resigned to seek refuge on windy heights or near the coast (Negri 1700: 107-108; Acerbi 1802b: 45; Mantegazza 1881: 150). Despite emerging as a mere victimization of the fellow mammal and a manifest solidarity against the tedious insect, the Italian travelers inadvertently provided insight into an interspecies relationship that lies at the core of Sámi landscape knowledge associated with reindeer herding. As explored more in detail in the following paragraphs, this relationship is understood as a form of kinship rather than antagonism.²¹⁵ While insect harassment undoubtedly poses a significant threat to reindeer by disrupting their feeding patterns during the summer (Blix et al. 1998: 83), it also plays a crucial ecological role that benefits both reindeer and herders by encouraging the animals to remain in flocks (Kitti et al. 2006: 150).

Another antagonistic role that emerges from the writings of the Italian travelers is that of mosquitoes as enemies to quietude and natural silence, a disturbance evident in the passages cited above and that is further poignantly captured in Loschi's log entries:

Anche nel silenzio della notte chiara – quando non vi sono le nostre piccole nemiche alate e punzecchianti – il tempo trascorre in una contemplazione tranquilla, serenamente riposante. (Loschi 1935: 145)²¹⁶

The third major declination of mosquitoes is thus of a purely acoustic nature. Although musical lexicon has been caustically associated with the droning of this insect in every travelogue considered, this sound is ultimately framed as an overwhelming intrusion – nothing more to the human ear than an inescapable, obstinate, and unmusical *nuisance*.

As the previous paragraphs have sought to demonstrate, a shared sonic coloniality transpires from the sound events collected in the written accounts of

²¹⁴ The original passage reads: «Questi pigmei de' Lapponi combattono, non già contro le grue, come alcuno favoleggia, ma bensì contro la zenzale, e la maggior parte di loro la perde, perchè sono violentati a sloggiar dal suo paese ogn'anno per qualche mese».

²¹⁵ A contrasting perspective within Sámi written production is provided by the Sámi religious leader Lars Levi Læstadius, who reinforces the antagonistic relationship with this tiny insect, aligning with biblical ontologies that regard mosquitoes as a plague and within which Læstadius himself was educated (in Negri 1700: 113).

²¹⁶ “Even in the silence of the clear night – when our little winged and pricking foes are absent – time passes in quiet contemplation, serenely restful.”

Italian travelers in the European Arctic. This acoustemology has developed within a dominant history of listening where, over millennia, these dipterans have become synonymous with one of the most recognizable and undesirable non-human sounds in nature (Winegard 2019: 7). The Virgilian *Culex*, which as a Muse sought to captivate even the most reluctant listener, has consistently perished to the same fate – misheard and dismissed with indifference, intolerance, and irritation. However, in its multispecies storytelling as a form of knowledge production that seeks to listen and stay “with the trouble” (Haraway 2016), *Culex* opens to an alternative onto-epistemology where the insect embodies the possibility of a mutual ecology between humans and mosquitoes, on the condition that humans attempt to actively listen and decipher the messages that mosquitoes may convey.

*Et quoscumque novant vernantia tempora flores,
his tumulus super inseritur; tum fronte locatur
elogium, tacita firmat quod littera voce:
“parve culex, pecudum custos tibi tale merenti
funeris officium vitae pro munere reddit”²¹⁷
(Virgil 1918: 402; vv. 410-414.)*

Advocates

*Listening in wild places, we are audience
to conversations in a language not our own
(Kimmerer 2013: 48)*

Do mosquitoes speak to us? Can we truly hear and decipher their messages? Our ability to understand mosquitoes is often hindered by an aversion contingent with the sense of discomfort their distinctive sound manifests – a sound presaging itch, exasperation, if not even fear, as potentially lethal vectors that are challenging to avoid or control. What practices would be required to liberate our sense of hearing from the encultured ways of listening that vehemently discriminate this insect’s *voice* as mere nuisance? During my fieldwork, I explored these questions by engaging with instances of multispecies storytelling that, much like the Virgilian *Culex* sought to do, propose an onto-epistemic partnership with this commonly undesirable other-than-human being. In Sápmi, this partnership takes on manifold forms within the ecology of the Arctic environment. As this paragraph attempts to

²¹⁷ “And each fair season spreads it’s odor here. / Last o’er the tomb a stone the shepherd rear’d, / Where rudely grav’d these silent lines appear’d. / ‘Poor little gnat, these fun’ral rites receive, / What thou deserv’st, and all the swain can give” (*The Culex of Virgil*, with a Translation into English Verse by Lucius Manlius Sargent, Etc. Lat. & Eng, Emerald Press, by Belcher and Armstrong, 1807: 38).

demonstrate, *juoiggus* represents a privileged sonic relationship, one that establishes and reinforces multispecies kinships where mosquitoes are deemed worthy of ecological respect, moral concern and not less significant aesthetic qualities. To move beyond hegemonic sonic colonialities and appreciate the musicality of mosquitoes, I consulted four “mosquito advocates” from Sápmi, whose onto-epistemologies envision this insect as kin rather than foe, overturning the three major declinations emerged from the travelogues analyzed in the previous paragraph. I refer to them as advocates, playing on the Latin etymology of *advocare* – the combination of *ad* (to) + *vocare* (to call), which in turn stems from *vox* (voice). Thus, *advocare* signifies summoning, giving voice, pleading in favor of someone. As this chapter aims to demonstrate, those *ad-vocate* for mosquitoes do so both figuratively, as supporters, and literally, by taking on the voice of mosquitoes in their own and amplifying it through *juoiggus*.

A first misconception that needs to be dispelled, however, given the unlikely generalizations that often stray from reality, is that not all Sámi appreciate mosquitoes equally – or rather, not all Sámi appreciate mosquitoes. Inger Mari Aikio makes this clear, candidly stating: «I hate mosquitos! When they bite me, the bite is itching for a week».²¹⁸ In her contribution to the audio-anthology, however, she clarifies how



<i>Muhto ii ieš dat jietna, ii dat dienu váivvit, go dat lea goitge dakkár de go muhtin láhkai dat lea hui čáppa musihkka dalle go mun diedđan ahte dat ii mu čugge, muhto dat lea hui finna musihkka dat ieš alddis</i>	But it's not the sound itself bothering me, because it sounds somewhat pretty, like a beautiful music, when I know it's not going to sting me. It's a very beautiful music in itself.²¹⁹

Mai Britt Utsi is also quick to demystify this generalization in the opening lines of her *muitalus*, precisely dedicated to this minute other-than-human actor:



<i>Na diedđusge sámi maid eai diedđusge liiko ahte čuoikka manná deiki bealji maddagii dahje rihtet dahje muogir. Ja diedđusge mii geahččalit mii maid sudjet iežamet dan čuoikka vuostá.</i>	Of course, the Sámi don't appreciate it when mosquitoes and other insects, get inside one's ears. And of course, we also try to shelter ourselves from mosquitoes.²²⁰

²¹⁸ Inger Mari Aikio, personal communication, June 3, 2021, Buolbmatjávri, Sápmi.

²¹⁹ Aikio 2024.

²²⁰ Utsi 2024.

Jus eai boađe mihcamárat, de goit bohtet dalle guovtti soabbai (Uhca Pier Esthera Máijá, Mai Britt Utsi)²²¹

As mentioned in the opening paragraphs of this chapter, *čuoikkat* mark the passage of time and the changing seasons within Sámi *árbediehtu* and storytelling. The massive presence and ecological relevance of this small dipteran in the summer is so significant that it has been linguistically assimilated into weather terminology. For example, the word *čuoikabálvái* refers to a specific weather condition characterized by clouds of mosquitoes and other Arctic flies (*Diptera: Simuliidae*) that fill the air and even obscure the sky – akin to saying “today is cloudy”, but with the clouds formed by heated mosquito swarms, much like those that caught Acerbi and Mantegazza in disbelief.²²² Due to the seasonality of this phenomenon, mosquitoes lend their name to an entire time of year: *čuikeit*, when the weather begins to be such warm and pleasant that mosquitoes, gnats, and other flies become especially abundant (Nielsen 1932: 423, 433; Eira 2011: 41; see also Wielgolaski 1975: 212).²²³ According to Sámi landscape knowledge, the start of *čuikeit* coincides with midsummer (Olsén et al. 2019: 174):



ja jus eai boađe mihcamárat de goit if they don't come by midsummer,
bohtet dalle guovtti soabbai. they'll come with two sticks.²²⁴

It is precisely during this time, Mai Britt Utsi continues, that several practical coping strategies and situated knowledge are employed to survive the peak of the bugging activity of mosquitoes:



Mun láven vehá várret daid čuoikka I try to pay attention using some
daid sujiin, nugo das da mosquito protections, like the
čuoikkagáhpír, dego čuoikka rakkas, *čuoikkagáhpír*, the *čuoikkarákkas*, the
cuojka rásii, suovastit čuoikkaid. *čuoikkarássi*, or *suovastit čuoikkaid*.
Ja čuoikkagáhpír, da lea diekkar We use the *čuoikkagáhpír*, a
assehis dinga bivttas maid don bijat transparent hat to wear on your head,
oaivai, oaivi nala amma nu. you know what I mean.

²²¹ “If they don't come by midsummer, they'll come with two sticks”

²²² The footage of a mosquito swarm recorded by Kay Erikssen and published in the Norwegian national newspaper is particularly illustrative of the suffocating ubiquity of mosquitoes in certain areas of Sápmi (Olaussen 2023). In biological terms, 13 mosquito species are currently buzzing across Sápmi, but as Arctic temperatures rise, mosquitoes are emerging earlier, their life cycles are accelerating and extending, and new species are migrating from southern regions (Norum et al. 2021: 423; Sámiráddi, Sámediggi 2023: 54; cf. Culler, Ayres, and Virginia 2015).

²²³ In Davvisámegiella: “Mihcamárbeaivái boadán vaikko guovtti soabbái, jus ovdal juo in leačča joavdan”. Mai Britt Utsi, Oral teaching (personal communication), July 3, 2023, Guovdageaidnu; Johan Sara Jr., Oral teaching (personal communication), March 6, 2023, Máze, Sápmi.

²²⁴ Utsi 2024.

<i>Ja čuoikkarákkas dat lea diekkar sis- tealta maid don bijat mahkaš lavui dahje alggos murrii čanat go don áiggut nohkat.</i>	And the čuoikkarákkas is an inner tent made of thin fabric that you put in the lavvú or you tie it on a tree when you sleep outside.
<i>Ja čuoikkarássi, guohca rássi, da lea diekkar don leat dat maid mii gohčodit gouhcarássi, dahje čuoikarássi.</i>	And then we have the čuoikkarássi, an herb that is commonly known as gouhcarássi, which means rotten herb.
<i>Go don váldat dan na lieđit ni, ja de cuvke dan ja ne, de čuoika vuolla.</i>	When you pick the flower and you crush it, the mosquito stays away.
<i>Čuoika ii liiko dan. Jo ja sihke dat lastat ja lieđit lea dan ávki, de lea latina namma, Ledum Palustre.</i>	The mosquito doesn't like that. And its leaves and flowers are very beneficial too. Its Latin name is <i>Ledum Palustre</i> . ²²⁵

Mai Britt Utsi concludes by integrating *suovastit čuoikkaid* into these coping strategies – the act of building up smoke, which, along with a strong wind, serves as one of the most effective deterrents against every Arctic fly (Lindberg Halme Whitehorn 2024). However, the most valuable protection against Sámi mosquitoes – one that neither Negri, Acerbi, Mantegazza, nor Loschi were aware of or could benefit from during their respective journeys – is the mastery of the *čuoika luohiti*:



<i>Ja olbmot han mahtte čuoikka luodiid ja daida ii beroš čuoikka, mun in borahalla čuoikka ii baljo goassege.</i>	And those people who well mastered the <i>luodit</i> of the mosquito aren't bothered by the mosquito: I am rarely eaten up by mosquitoes. ²²⁶

Except for the vast variety of *luodit* associated with reindeer (Turi 1910; Skaltje 2005; Eira 2022; cf. Jones-Bamman 1993: 135),²²⁷ animal *luodit* tend to be more standardized within the local traditional repertoires of *juoiggus*, meaning there are not many variants of the *čuoika luohiti* (cf. Jones Bamman 1993: Aubinet 2020a).²²⁸ The *luohiti* joiked by Mai Britt Utsi originates from the Guovdageaidnu area and was passed down to her by her husband's aunt, Biret-áhkku, during a particularly intense *čuikit*. She lived in Boaronjárga, between the river and the lake, where mosquitoes thrive abundant due to the area's high moisture levels and stagnant water conditions. This setting is decisive to the story that Mai Britt recalls about her inheritance of the *čuoika luohiti*:

²²⁵ Utsi 2024.

²²⁶ Utsi 2024.

²²⁷ Mathis Eira, oral teaching (personal communication), June 20, 2023, Guovdageaidnu, Sápmi.

²²⁸ Mai Britt Utsi, oral teaching (personal communication), July 3, 2023, Guovdageaidnu, Sápmi.

I was in Boaronjárga with my kids, and they were running around as we waited for Biret-áhkku to join us on a trip up the river. And, you know how it is, the children got in the car closing the doors very quickly, because they knew that if we left the doors open too long the car would have filled up with mosquitoes. And Biret was old, so it took her some time to get into the car. We could see so many mosquitoes coming in while we waited for her to sit. Finally, she closed the door, and we finally got moving. And I remember the kids shouting: «Open the windows, let the wind come! There are too many mosquitos here!» To whom she calmly replied, «Mii dáppe gos čuoikkat? No mosquitos here. It's in your head. I don't see them» And then she started to joik the *čuoika luohti*. And she joiked the mosquito all the way up the 10 kilometers to the river place [laughs]. That's when I learned this *luohti* from her. Only later I discovered from Ánte Mihkkal Gaup that people who master the *čuoika luohti* are not bothered by the mosquito.²²⁹

I will expand on the role of the *čuoika luohti* within human-mosquito relationship in the following paragraphs and through further examples. At this stage, my aim is to emphasize how the nuisance of mosquitoes is rationalized and mitigated via situated knowledge that grant the Sámi with multimodal skills to shelter from mosquitoes while recognizing the insect as a vital co-habitant in the tundra's ecology. To borrow Áilu Valle's reflections on this insect, living in Sápmi means «to grow immune to mosquitoes» and «to understand it as a friend».²³⁰ After all, the «annoying part of the mosquito» is as integral to its «deep philosophy» and local ecology as the goods and benefits it brings throughout the summer, argues Mai Britt Utsi:



<i>goitge da lea oassi sámi luonddus, jus čuoikka ii boađe, de ii boađe buorre. De ii boađe bahkka lieggas mii šadda daid murjjiid, guliide biebmua ja loddiiide biebmua. Doppe lea nu ollu daid dievriid ahte daid besset borrat daid.</i>	still, it is an integral part of Sámi environment: if the mosquito doesn't come, no good follows either. It means warm weather wouldn't arrive either, berries wouldn't grow, and there wouldn't be food for fish or birds. With so many insects around, they have a lot of nourishment.²³¹

The ecological knowledge that Mai Britt draws upon accords the mosquito essential ecosystemic roles, ranging from pollinator to fodder and biomass – qualities often disregarded in the narrative around this insect, even in disease-free contexts (Ford et al. 2022: 140; Koltz, Culler 2021: 75). Within this relational ontology, the Sámi

²²⁹ Ibidem.

²³⁰ Áilu Valle, oral teaching (personal communication), May 7, 2021, Ávvil, Sápmi. Nils-Aslak Valkeapää, on the other hand, notes how settlers (*dáččat*) who also live abundant in the North have not developed such co-living skills with mosquitoes and end up being «bothered by mosquitoes, and strive, cursing to get rid of them» (Valkeapää 1971 [1983]: 22).

²³¹ Utsi 2024.

have come to live with *čuoika* as a critical piece of a broader network of care towards the Land and across Earth beings since the time mosquitoes arrived in Sápmi. According to the Sámi myth about the arrival of mosquitoes, prior to a certain time, there were no mosquitoes in Sápmi. Mai Britt Utsi accounts this story in her *muitalus*:



<i>Juo gos dat vulge ja bohtet dat čuoikat Sápmi, dat oaivildit deike davás, dat cuoikkat lea son, dat lea ‘she’, son, dat muitalit dat nieida. Dat bođii Lulli-Suomas, ja dat lei heavdni gii muitalii čuoikkaide doppe Lulli-Suomas ahte doppe gávdnu muhtin báiki, muhtin guovllu, dohko lea guhkki doppe lea davás, doppe orrut samiid, ja doppe lea bohccot, buoiddes bohccot, buoiddes guollit, ja dope daid johkagahtiis ja javregahtiis alas doppe lea aibbas fiina dillii. De golbma čuoika vieljazagat vuolgge, je de dat jávke, dat lahppodedje dohko, okta heavvanii mielkegivlui, nubbi Ovttá bihkkalihtai darvanii, ja guolbmat hávkkai suova sisa ovttá lavus, muhto goitge dat dahpahusaid nu ahte lahppodedje. De dat eará čuoikkat alge jurdašit gos dat leat, gos dat šadde, ja de bođii dat heavdni fas dohko ja logai son ii dieđe gosadat leat šaddan, son ii sahte muitalit. Ja de lohke buhtta doppe, mii Vuolgít ohccat, ja de bohte deike ja eai leat šat mannan eret goassege... Danin mis leat cuoikkat. Ja jus eai boade mihcamárat de goit bohtet dalle guovtti soabbai.</i>	Where do they come from, and where do they go, these mosquitoes in Sápmi? What do they signify here in the North? And why is the mosquito referred to as ‘she’, as in a girl? It came from Southern Finland, where the spider told the mosquitoes about a place, or rather a region far up in the North, where the Sámi live, and where there live reindeer, fat reindeer, fat fishes, and where riverbanks and lakesides are in such nice condition. So then, mosquitoes set out, but three of their brothers disappeared, or rather they could not be found. One of them drowned in the milk trough, another got stuck in a tar bucket, and the third was suffocated by the smoke inside a <i>lávvu</i>. Regardless of the circumstances, they all vanished. Seeing they weren’t coming back, the other mosquitoes began to worry. When the spider returned, she said she couldn’t tell where they had disappeared to. Despite the concern, the mosquitoes said, “Fine, we’ll go find them”, and so every one of them came here and never ever left... That’s why we have mosquitoes. And if they don’t arrive by midsummer, they’ll come with two sticks.²³²

This story was first integrally reported by Johan Turi in the *Lappish Texts* (“About the mosquitos in olden time”), where the narration concludes with the colossal mosquito swarm arriving in Sápmi and encountering a reindeer herd in the woods. Since none of the mosquitoes in the swarm had ever seen reindeer or such a multitude of animals, «they flew at the herd and hurried them to the top of the mountain» (Turi, Turi 1920: 124; see also Palomaki 1993: 5). As this pseudo-

²³² Utsi 2024.

cosmogonic myth suggests – beside listing some of the original mosquito deterrents –, the aforementioned interspecies mutuality of mosquitoes is particularly evident in the ecological knowledge and landscape practices associated with reindeer herding, where the ecological significance of mosquitoes ties them to deeper entanglements with humans and reindeer, extending beyond mere markers of seasonal change and geo-spatial cohabitation of shared habitats. In her *muitalus*, Mai Britt Utsi recounts how *čuoika* is the best Sámi *biiga* – the best maid the Sámi could ever ask for. To validate this claim, she references a deep-rooted passage recorded again by Johan Turi in 1910, where mosquito swarms manifest their skill and meaningfulness in propelling the movement of reindeer:

Go šaddá báhkka, de bohccot ruhttet dakkár alla jienaid nala, gosa ii olmmoš beasa, ja ruhttet čuoikkaid (Turi 1910: 5)²³³

Though Italian travelers across centuries have described the relationship between mosquitoes, people and reindeer as an interspecies torment (see above), such interdependency endures in the traditional knowledge of Sámi reindeer herders as a gift that facilitates the assembling and movement of the herd. Mosquito swarms compel the reindeer to gather into a large herd because

čoahkis daid vuoignamis šaddan áibmorávdnji lea garrasit ja doallá čuoikkaid badjelis. Dáid áiggiid bohccuid lea álkit čohkket maid áidái dahje gárdái miessemearkuma várás, go dat leat jo lunddolaččat alážiin čoahkkis. Dajaldat “čuoika lea badjealbmá rean̄ga” doallá deaivása, go čuikenáigi ja čuoikkaid mearri váikkuhit hui ollu maid bohccuid geasseatnamiidda johttámii. (Olsén et al. 2019: 150)²³⁴

This explanation has been confirmed to me in numerous conversations within herding families; a perspective that Ante Aikio, from the Finnish side, also shares:

During the summer season, mosquitoes are everywhere, and they always try to sting the reindeer driving them into compacted flocks – at least, until they change the winter fur with a shorter summer coat, and mosquitoes and horse flies cannot longer pierce them. Reindeer are so exasperated by the mosquito that they escape them trotting up on the *duoddarat* where it's windier, and by walking towards the coast, where the wind is also stronger and, of course, because of pastures.²³⁵

Reflecting on the complicity between the mosquito and the wind in the joint act of driving reindeer along their summer trails, Mai Britt Utsi notes interesting

²³³ In the translated edition: «When it gets hot, the reindeer head up onto high glaciers where people cannot follow, and because of the mosquitoes» (Turi 2011: 14)

²³⁴ “the airflow created by the herd’s breathing is stronger and keeps the mosquitoes a bit higher up. During these times, it is also easier to gather the reindeer into a fence or corral for calf marking, as they are naturally already together in the highlands as one herd. The saying ‘the mosquito is the reindeer herder’s helper’ is therefore accurate, as the timing of the mosquito’s appearance and their numbers significantly affect the reindeer’s movement toward summer grazing areas.”

²³⁵ Ante Aikio, oral teaching (personal communication), June 2, 2021, Levi, Sápmi. See also Müller-Wille et al. 2006: 33; Olsén et al. 2019: 174.

analogies and kinships between these significantly distinct yet related other-than-human beings. With *biegga* already discussed in detail in the previous chapter, Mai Britt's *muitalus* continues:



<i>Aina go boazu lea biegga buorri ja čuoikka lea biegga bárdni. Ne da lea. Ja biegga bárdni dat lea dan čuoika mii láidesta eallu, da manná ovddabealde ja givsida dan ovddimus bohcco nu ahte dat rohtastii earat. Ja dat čuoikka lea biegga bárdni, ja boazu lea buorre bealli biekkas, Mikkel Nils Sara lea čallan iezas dohktorgrada. Go dat čuoikat ja daid eará divriid givsidiit bohccuid mannat dohko várregilgii jo ja dat lea seamma dien dat biegga bárdni, jo dat lei dan jodiheaddji ja čuoika šaddá muhtun lahka dego bieggabárdni, mii doalvu dien eallu. Ja čuoika nieida lea dan gii vuojeha manngabealde nu ahte dan eallu manná dohko várregilgii gos leat jasat doppe beasset eret čuoikain, juo čohkke dan eallu.</i>	And so, the reindeer is the good of the wind, and mosquito is the 'son of the wind'. That's how it is. And the 'son of the wind' is that mosquito whose task is to pick the herd, going in the front and provoking the leading reindeer, which in turn pulls along all the others. Mosquitoes being the 'son of the wind', and reindeer being a 'good governed by the wind' is something that Mikkel Nils Sara wrote in his doctoral dissertation. Because mosquitoes and other insects tease the reindeer and push them uphill, this is a role that earned them the name of son of the wind, for the wind is the leader of the herd and mosquito inherits a task very close to this one, as it leads the herd too. And then the female mosquito is the one who driving from the back so that the herd follows uphill where it's cooler and with no mosquitoes. Together they collect the herd.²³⁶

The ability of mosquitoes to round up reindeer and collect them in flocks is of an exquisitely acoustic nature. When these insects are mature enough to mate, they engage in a ritual portrayed by Spielman and D'Antonio as a "dancing swarm", where hundreds or even thousands of male *Culices* assemble in a thick, whining cloud over a specific landmark – in this case, a moving one, the reindeer – known as a "swarm marker" (Spielman, D'Antonio 2001: 8). It has been previously noted how the sonic skills of mosquitoes are determinant in pairing males and females of the same species, with both sexes responsive to and drawn to the wingbeat frequencies of their mates (see above). As a result of the shrill droning tone emitted over the marker, «females will be drawn to the swirling mass of males and fly into it one by one» (ibid: 24). In turn, female mosquitoes, with their lower-pitched but louder buzzing, integrate into the 'eco-polyphony' of the swarm, which now

²³⁶ Utsi 2024.

completely dominate the sonosphere surrounding their landmark and victim – a fully compacted reindeer herd.

The gender dynamics and the acoustic development of this herding act beyond human are well known and passed down within Sámi acoustemologies. «Every mosquito has its own voice», Mai Britt reflects, but the orchestration of the herd is «directed by the strongest and loudest of the mosquitoes: the female mosquito, *čuoikanieida*, who is the best Sámi *biiga*». ²³⁷



Jurddaš, nie unni? Ha? Can you believe it, uh? So little...
Ja dan fábmui! Wow! And yet so powerful! Wow!
Dien čuoikanieida, son lei dat gii The female mosquito, she was such a
doalvvui ovddasguvlui! driving force! ²³⁸

Century-old Sámi narratives, recorded in the ethnographic accounts of Samuli Paulaharju (1922: 99), distinctly resonate with Mai Britt ecological wonder:

— Sääski ajaa porot tunturiin,
vuomista pois porot ajaa kokoon
Ei porojen kanssa tulisi toimeen,
jos ei sääskiä olisi.
Se on pikku elävä,
mutta kyllä sen edessä elo pakenee. ²³⁹

Although this extensive contextual picture might seem only somewhat tangential to Sámi acoustemologies and *juoiggus*, the mosquito advocates with whom I engaged during fieldwork highlighted the centrality of all the storytelling that both precedes, follows, or even pertains traditional and modern renditions of mosquito *luodit*. *Árbediehtu* is integral to *juoiggus* and contributes to shaping it as something more-than-music. Without this foundational knowledge, achieving a comprehensive understanding of how *juoiggus* relates to Sámi acoustemologies and the broader ecosystems of Sápmi becomes challenging, if not unattainable. Exploring the *čuoika luohiti*, Mai Britt became particularly fond of and deeply inquisitive about the narrative linking reindeer, wind, and mosquitoes in an ecosystemic interdependency, as it weights significantly on the poetic content of the *dajahus* for the *čuoika luohiti* she learned from Biret-áhkku (Audio 7):

²³⁷ Mai Britt Utsi, oral teaching (personal communication), July 3, 2023, Guovdageaidnu, Sápmi.

²³⁸ Utsi 2024.

²³⁹ “The mosquito drives the reindeer to the *duoddarat* and herds them together away from the valleys. You would not get along with the reindeer if there were no mosquitoes. It is a tiny creature, yet even a large herd will flee before it.”



/: Na lo, le, loi, lei, loi-le, lo:/	Na lo, le, loi, lei, loi-le, lo...
<i>Ja mihcamáraide jo guovtti soabbái</i>	And at Midsummer on two sticks
/: Na lo, le, loi, lei, loi-le, lo:/	Na lo, le, loi, lei, loi-le, lo...
<i>Ja sápmelačča buoremus jo biigá</i>	The best maid of the Sámi
/: Na lo, le, loi, lei, loi-le, lo:/	Na lo, le, loi, lei, loi-le, lo...
<i>Ja bieggabárdni lei jo láidesteaddji</i>	And the <i>bieggabárdni</i> was the leader
/: Na lo, le, loi, lei, loi-le, lo:/	Na lo, le, loi, lei, loi-le, lo...
<i>Ja čuoikanieida lei jo vuoje- headdji</i>	And the <i>čuoikanieida</i> was the driving force
/: Na lo, le, loi, lei, loi-le, lo:/	Na lo, le, loi, lei, loi-le, lo...
/: Na lo, le, loi, lei, loi-le, lo:/	Na lo, le, loi, lei, loi-le, lo...
<i>Ja golbma vieljaža jo ledje,</i>	The three mosquito brothers
/: Na lo, le, loi, lei, loi-le, lo:/	Na lo, le, loi, lei, loi-le, lo...
<i>Ja okta heavvanii jo mielkegiului,</i>	One gets stuck in a tar bucket
/: Na lo, le, loi, lei, loi-le, lo:/	Na lo, le, loi, lei, loi-le, lo...
<i>Ja nubbi darvánii jo bihkkalihtái</i>	One drowns in the milk trough
/: Na lo, le, loi, lei, loi-le, lo:/	Na lo, le, loi, lei, loi-le, lo...
<i>Ja goalmát hávkkai suova sisa jo,</i>	One suffocates by smoke
/: Na lo, le, loi, lei, loi-le, lo:/	Na lo, le, loi, lei, loi-le, lo... ²⁴⁰

The precise origin of this *dajahus* for the *čuoika luohti* remains undetermined, although we know that Mikkel Per Anderen Bongo – in the first half of the last century – was already joiking it (Eira 2022: 20).²⁴¹ The effective symbolism of the mosquito within these verses, however, has contributed to the *dajahus* maintaining a relatively stable formulation over time, unlike the morphology of the *luohti* itself, which varies across different regions and families. This *dajahus* does not have many words, but each of it is exquisitely pondered to evoke the mosquito and its meaningfulness within tundra's relational ecologies, qualities through which the Sámi wish to continue to celebrate, appreciate and remember this insect. In addition, Mai Britt Utsi introduces verses that directly reference the aforementioned ancient story of the mosquito's inception in Sápmi, specifically alluding to the *golbma vieljaža* (three mosquito brothers). The first verses of the *dajahus* might appear cryptic to those unfamiliar with the traditional knowledge

²⁴⁰ Utsi 2024. My deepest gratitude to Mai Britt Utsi for her transcription and translation of the *dajahus*, as well as for generously allowing me to attend her class on the *čuoika luohti*.

²⁴¹ A different *dajahus*, contextual to the South Sámi *vuelie* tradition, was already documented in the 19th century. It is mentioned in Mantegazza's travelogue (1881: 22) and refers to a transcription by *juoigi* and priest Anders Fjellner, as reported by Düben (1873: 346).

surrounding the mosquito. However, in light of Mai Britt's *muitalus*, it becomes clear that each verse alludes to *čuoika* by attributing concrete qualities or responsibilities to the insect.

In summary, the first line references the time of the year when *čuoika* is at its most ravenous, employing the metaphor of two sticks to evoke the red, swollen marks that leaves on its victim's skin. The second line, through rhetorical personification, attributes to the mosquito a profession, emphasizing its value as a *biiga* (maid) to the Sámi. Inger Julianne Eira reflects on the materiality of this depiction:

Áhččán lea dávjá munnje lohkan, ahte gal min biigá dál fargga buktá ealu várrái, vai ealu šaddá álki gárdái viežžat. Miessemearkunáigge láve eallu dávjá leat vuomis gidasgease, gos ii leat nu álki viežžat ealu gárdái. In ipmirdan vuosttaš geardde maid oaijvildii go nie logai, muhto de čilgii ahte eallu ii biso vuomis go čuika. Čuoika de doalvu ealu duoddarii, ja eallu manná álo vuostebiggii, ahte čuoika doalvu ealu vuostebiekká guvlu. (ibid: 21)²⁴²

Tormented by mosquitoes in the woods, the reindeer seek refuge in the wind, finding it at the tops of the *duoddarat*. Due to this “mischievous” connivance, the *dajahus* not only conveys the task and utility of the mosquito in relation to the reindeer herding profession, but it also practically covers how reindeer herds behave during *čuiki*. In particular, the third and fourth verses sequentially describe the complicity between the male mosquito (*bieggabárdni*) and the female mosquito (*čuoikanieida*). The male, much like the wind (in fact as “son of the wind”), leads and orients the herd's movement (*láidesteaddji*), while the female provides the driving force to propel the herd uphill (*vuojeheaddji*). The lexical distinction in denoting the genders of the mosquitoes further demonstrates Sámi's deep understanding of swarm ecology and how male and female mosquitoes work together as the best Sámi *biiga*.

Performing the *čuoika luohiti* thus becomes a way to pass down ecological knowledge and landscape practices of communion between entangled and interdependent humans and other-than-humans. Working with young students at the Sámi University of Guovdageaidnu, Mai Britt Utsi notes how, despite the alluded sense of respect and kinship towards mosquitoes within the verses of the *dajahus*, it is commonly expected that the *čuoika luohiti* would transmit the same restless, painful, and irritating sensations associated with the insect sting or when it «*njurgu bealljemáddagii* [it whistles in the ear root]. It is expected to be a hard-to-endure tune, the *čuoikka luohiti*, and instead *čuoika* got such a fine *luohiti* for

²⁴² “My father has often told me that our *biiga* will soon bring the herd to the mountain, or the herd that it will be easier to fetch inside the fence. During the reindeer calf marking, the herd is often in the late-spring forests, where it is not so easy to fetch. I didn't understand at first what he meant when he said that, but then he explained that the herd doesn't stay in the woods when it's *čuiki*. The mosquito then leads the herd to the *duoddarat*, and the herd always goes against the wind, so that the mosquito leads the herd to a place where there's headwind.”

itself».²⁴³ Through these reflections, joiking the mosquito also emerges as an act of gratitude, a way to honor *čuoika* for being such a helpful *biiga* for reindeer herders and a valuable gift to the broader environment. Like Mai Britt Utsi, Inger Julianne Eira also confirms the Sámi acknowledgement of the ecological role of mosquitoes as pollinators:

Sápmelaš lea árvvusatnán čuoikka daningo das lea stuora ávki leamašan, ja lea ain ávki sihke boazobargguin ja maiddái lundui. Eadnán logai okte munnje ahte jus čuoikkat eai livčče Sámis, dalle eai livčče duoddara gollit ge šaddat, namalassii luopmanat. Luopmanat ja nugo eará ge muorjjit dárbbášit divrriid mat háddjejit šaddogavjja, vai dat sáhttet šaddat ja gilvojuvvot.²⁴⁴ (Eira 2022: 22)

The power of mosquitoes within the Arctic environment holds profound significance for the Sámi, representing a deep ecology that animates and sets the entire Land in motion. Mai Britt recalls how, in 2006, she participated in the annual WINHEC meeting in Cloquet, Minnesota. At the time, she was Rector of the Sámi University of Applied Sciences (Allaskuvla), and each Indigenous institution present at the meeting was asked to express a prayer or an act of gratitude rooted in their own tradition:

and at the time we were actually applying to have the Allaskuvla recognized as an institution, you know, as an Indigenous university. And so we did. And it was a very positive result. But then the meeting started, and they asked me to go with all the other representatives and maybe say a prayer in our language or chant a sacred song. And when I went up there, I started to joik the mosquito. And everyone sat there, thinking it was a very sacred song. And when I revealed it was the mosquito, everyone in the hall was laughing. Everyone!²⁴⁵

Mai Britt lets out a heartfelt laugh before growing more serious and concluding her recollection:

But in a way it is a sacred song. Because it's a Sámi joik to the mosquito. It's our traditional knowledge, ecological knowledge, it has the history of our land. And it is very important.²⁴⁶

After listening-with these deep onto-epistemological foundations, bordering on the cosmological, we begin to glimpse why Turi, in his collection of *muitalusat*, chose to dedicate «such an apologetic story about a tiny, insignificant animal» (Mardoeke 2016: 90; see above, Turi 1920: 122-124). Simply because, for the Sámi, this creature is anything but insignificant – dismantling one of the three major

²⁴³ Mai Britt Utsi, oral teaching (personal communication), July 3, 2023, Guovdageaidnu, Sápmi.

²⁴⁴ “The Sámi have valued the mosquito because it has been, and still is, of great use both in reindeer herding and in the environment. My mother once told me that if there were no *čuoikkat* in Sámi, then there no gold would grow on the *duoddarat*, namely *luopmanat*. *Luopmanat* and like other berries need *divrriid* that spread the plant's pollen, so that they can grow and be harvested.”

²⁴⁵ Mai Britt Utsi, oral teaching (personal communication), July 3, 2023, Guovdageaidnu, Sápmi.

²⁴⁶ Ibidem.

declinations of this insect found in the writings of outsiders who traveled through the Arctic summer, and even up into contemporary literature. Maj-Lis Skaltje – borrowing Hommá Lásse’s words – eloquently invites a reflection on the democracy of species when she observes how «even the tiniest being gets its own *luohti*» (Skaltje 2005: 271).



<i>Ja dat lei sápmelaččat buoremus biiga, ja dan luohti dan gullat athe dat lea bieggabardni ja čuoikkaneida ja dat vuodjelit ealu. Nie lei dat muitalus.</i>	And so, this was the story of Sámi’s best <i>biiga</i> which, together with its <i>luohti</i>, tells how <i>bieggabardni</i> and <i>čuoikkaneida</i> lead of the herd. That was the story.²⁴⁷

The significance and companionship of mosquitoes for the Sámi has long been, and continues to be, a great source of inspiration for many *juoigut* and artists, both in traditional expressions and more contemporary works. In his introduction to the English translation of Áillohaš’s Sámi poetic masterpiece *Ruoktu váimmus*, Harald Gaski commends how the poet «heard the calling of birds, the roaring of the rivers and the humming of millions of mosquitos. He would grow to include all these sounds, in his words, in his music, and he would create a symphony of nature to enjoy a life-style connecting them to Nature» (Valkeapää 1985[1994]: i). As the passage hints, beyond the stories and skills that the Sámi have inherited from this insect, if we listen more attentively and entrust our ears to their *jienat*, «we can learn a lot of joiks from mosquitoes». ²⁴⁸ The recognition of *čuoika* as a skilled *juoigi* is something deeply embedded in the Sámi history of listening and explicitly surfaces in traditional storytelling, as earlier exemplified by the *dajahus* of the *čuoika luohti* transcribed by South Sámi *juoigi* and priest Anders Fjellner and reported in Düben first (1873: 346), and Mantegazza later (1881: 22). According to this *dajahus*, the task of *čuoika* is to joik (translated as “to sing”) and entertain other Earth beings throughout the summer (see above).

Mai Britt Utsi further adds on the epistemological recognition of *čuoika* as *juoigi* by reflecting on her own reception of this *jietna* within a habitual auditory context:



<i>Čuoikas lea iežas jietna, jus don guldat don sahttát gullat</i>	Čuoika has its own voice and if you listen carefully, you can hear

²⁴⁷ Utsi 2024.

²⁴⁸ Mai Britt Utsi, oral teaching (personal communication), July 3, 2023, Guovdageaidnu, Sápmi.

ollu luodit doppe, jus don veallát a lot of *luodit* in it. If you lie outside,
 olggon, lavus ja gullat rággasis siste, or even on this side of the inner tent in
 don veallán gulla olggon bealde a *lávvu*, you can hear it outside:



Ahte dies bealje maddagii And from there it starts getting into you
 jus dus ii leat rákkas! ears too, especially if you don't have an
 Ja de don sahttát álgit jurdašit: inner tent! And then you start meditate:



[boagusta] Ii go lea duohta, dat lea [laughs] Isn't it true?
 vehá somá dat čuoika. It is pretty fun, the mosquito.²⁴⁹

The more Mai Britt allows the humming voice of *čuoika* to take over her own voice, the more she invites our ear to listen beyond the indistinct whining we typically associate with the *buzzing Other*. Some of the acoustic properties that can be found in the natural sound produced by a mosquito – namely its pitch contour, a timbre that is coherent and rich in harmonics and, to some extent, rhythmic developments – reveal inherent musical potential in her voice. Yet, we tend to dismiss these sounds as nothing more than an incessant nuisance when they assail us at night in our bedrooms, ending up caught in a Cartesian dualism. The sonic colonialities that affect our sense of hearing are rooted in an ontology that draws sharp distinctions between culture and nature, responding differently to each side of this binary (Kanngieser 2023: 691-692). Although sound and music-related disciplines have moved in a transcultural direction where musicality is no longer used as a discriminatory label in the categorization and description of practices that deviate from dominant aesthetics (Titon 2015; Feld 2015b; Giannattasio, Giuriati 2015; Staiti 2018; Berger, Stone 2019), human musical expressions «remain, and will for some time, the fundamental benchmark for analyzing and evaluating other aesthetic sound communications from the animal kingdom» (Martinelli 2011: 141; cf. Ochoa Gautier 2016; Lewy 2017). In this respect, zoomusicologist Dario Martinelli provocatively asks

what rational explanation there could be for *denying* that animal species (and *Homo sapiens* is one of them, as we all know) have aesthetic capacities and sensibility? If aesthetics is, as it is, a biological phenomenon, then it is just obvious that such processes have an active role in animals' cognition. (Ullrich 2014: 117)

²⁴⁹ Utsi 2024.

Martinelli advocates a biocentric approach that aspires to emic directions and starts from species in which an aesthetic action (creation/performance) elicits an aesthetic reaction (attraction/repulsion). He exemplifies this with the case of male humpback whales, who develop and perform complex songs to compete with other males, while females are drawn to the most successful performance (ibidem; see also Martinelli 2011: 31). Such an approach can be applied to a biocentric inquiry of how musical is mosquito since, as previously noted, the action/reaction dynamic described by Martinelli is also observable in mosquito ethology. This is what Biology Professor Ronald Hoy has tried to demonstrate with the *Aedes aegypti* mosquito in the laboratories of Cornell University. Hoy suggested that acoustics is an important part of the mating behavior of mosquitoes and carried physiological recordings directly from the Johnston's organ itself to see how it responded to wingbeat frequencies. Females are attracted (reaction) by the tone produced by a male partner (action), with whom she ends up singing a duet adjusting the wingbeat to come together at a common tone (see above):

What are they doing with almost as many sensory auditory cells as we have? Maybe they have to be tuning themselves very finely in frequency, just as we do. And wouldn't that be an interesting convergence, mosquitoes and people? The next time you hear a mosquito buzzing around in your ears, you might be thinking about the fact that there's a lot more going on in this buzzing than just flying over to give you a nibble. In fact, that buzzing sound is a mating call for many mosquitoes. And that mating call isn't a simple buzz. There's a lot going on, as far as a love duet between male and female. They are interacting on the fly and in song. (Cornell University 2009)²⁵⁰

If a fully emic biocentric understanding of other-than-human musical behaviors may however still seem out of reach as an alternative to anthropocentrism, an intermediate biocultural pathway guided by Indigenous sound ontologies and acoustemologies not embedded in nature-culture binomials can offer alternative teachings and frameworks for a broader, more meaningful and serious inclusion of diverse voices in the debate on musicality, even those that we conventionally regard as more alien or undesired (Skaltje 2005; cf. Feld 1988; Martinelli 2011; Brabec de Mori 2013; Lewy 2017).

Observed through this biocultural lens, the acoustemology of the mosquito in Sápmi is exemplary for three key reasons. First, the Sámi acknowledge the unfolding of Hoy's biophonic duet of male (*bieggabárdni*) and female (*čuoikanieida*) mosquitoes, «coming together at a common tone» in their swarming dance around reindeer and through the *čuoika luohti*. Additionally, this

²⁵⁰ Transcript from the video “Mosquito Hearing”, published by the College of Agriculture and Life Sciences (CALS) at Cornell University, on March 9, 2009: <https://www.cornell.edu/video/mosquito-hearing#:~:text=Male%20mosquitoes%20have%20a%20wing,a%20harmonic%20near%201200%20Hz.>

acoustemology moves beyond the simplistic aesthetic recognition of musicality in the sounds of *čuoika* – conceived as top-down qualities granted by humans to other-than-human beings – and instead positions the mosquito as kin, with an equal claim to the *juoiggus* heritage as any Sámi Earth being. Finally, within Sámi acoustemology and sound ontology, *čuoika* emerges as a recipient, a performer and a teacher of a relational practice that transcends musicality as ability of making sense of sounds, to outline a more-than-musical realm where *luodit* make sense of a whole echosystem.

Juohke áigodagas lea iežas šuokŋa, juohke eallis sierra jietna ja lávlla (Jóret Juhána Juhána Juhán, Johan Sara Jr.)²⁵¹

This chapter opened with the pivotal question, “How musical is mosquito?”, to which Mai Britt Utsi offered a rhetoric counter-question before humming (*huradit*) the little insect’s distinctive cry:

Do you hear a melody when you hear them?

It is undeniable that a defined melodic contour can be detected in Mai Britt Utsi’s voice as she imitates the mosquito before seamlessly transitioning to the *čuoika* *luohti*. Skilled vocal technique is fundamental to the ability to “enchant” the *juoiggalmas*, and sonic mimesis – if not even “phonomorphism” (Renzi 2021a: 93) – plays a particularly important role in the successful rendition of animal *luodit* (Aubinet 2020b). Specifically referencing the mosquito *luohti*, Inger Julianne Eira highlights how

[m]ohkiid, ravvgodemiid ja fanahallama bokte sáhhtá ovttá ládje gullat ahte lea čuoikkaneidda luohti. Go diehtá ahte lea dan luohti, de easkka sáhhtá govahallat ahte livčče dego čuoika mii boahhtá bealljemáddagii njurgut, go juoigi mohkasta ja alida jiena. Vaikke lea čuoikka luohti, beassá vuostávaldi oahpásnuvvat makkár doaibma čuoikkas lea sápmelaččaid ektui.²⁵² (Eira 2022: 22)

The vocal abilities of the *juoigi* contribute to vividly manifest the presence of the mosquito to the listener’s ear through the *luohti*. As Mai Britt Utsi suggests – highlighting the semiotic qualities of *juoiggus* on the indissolubility of signifier and referent in a *luohti* – what we hear in her voice is not «just music, but the mosquito itself» (cf. Somby 1995; Gaski 1999).²⁵³ This raised the question: If we can hear the mosquito in a *luohti* voiced by humans, can we also discern the *luohti*

²⁵¹ “Each season has its own sound, every animal has a distinct voice and tune.”

²⁵² “Through swings, stretches and other vocal techniques, one can hear in one way that it is the *luohti* of the *čuoikkaneida*. When you know that it is that *luohti*, you can imagine it like a mosquito that comes whistling into the ear root, when the *juoigi* bends the voice and raises the pitch. Although it is the mosquito *luohti*, the listener gets to know the function of the *čuoikka* in relation to the Sámi people.”

²⁵³ Mai Britt Utsi, oral teaching (personal communication), July 3, 2023, Guovdageaidnu, Sápmi.

within the *voice* of the mosquito? Encouraged by Mai Britt Utsi, I began working on my recordings of mosquitoes from the Govddaluovttafávli bog, attempting to detect *luođit* within them and evaluate the degree of morphological correspondence between human and mosquito voices. However, this proved particularly challenging for two interdependent reasons: (1) the density of sounds within a swarm interlaces several and widely spatialized pitch contours, whereas *juoiggus* is traditionally a solo, monodic form; and (2) this interlacing effect combined with the peculiar acoustic fingerprint of the wingbeat produce a timbre considerably different from that of the human voice, making conventional spectral analysis impractical for identifying any *luohti*.

In search of a viable approach, I consulted Johan Sara Jr. as a *juoigi* and *jietnaolmmoš* (literally, “sound person”) – as well as my field recording mentor in Sápmi – who I knew had recorded and incorporated *čuoika jienat* into his musical productions and sound art. In 2009, Johan released a discographic project entitled *Ludiin muitalan*, produced in collaboration with prominent *juoigi* Ole Larsen Gaino, Lásse Ovlá. Together, they conducted field recordings in five distinct environments across Sápmi, acoustically documenting the changing seasons, the resulting echosystemic diversity, and how environmental sounds interacted with *luođit* performed outdoors:

It was 2001. We did recordings of Ole Larsen’s joiking at each season of the year. But we did it out there, in the *meahcci*, not in the studio with field recordings added later to the mix. We were interested in observing how different animals reacted to the joik performances. It was fascinating to hear the responses of the reindeer and the interactions between the mosquitoes, birds, and Ole Larsen’s joiking. It felt as if there was a deeper form of communication waiting to be uncovered. *Juohke áigodagas lea iežas šuokŋa, juohke eallis sierra jietna ja lávlla*. Each season has its own sound, every animal has a distinct voice and tune.²⁵⁴

The interaction between Lásse Ovlá and the mosquitoes is a distinctive feature of the opening track of the album, *Geassi (Summer)*.²⁵⁵ For over sixteen minutes of spatial recording, the *juoigi* performs a series of traditional *luođit* while walking through the *meahcci*, fully enveloped by a droning swarm – almost as if he were a *swarm marker* himself. In addition to capturing the omnipresence of *čuoikkat* and their echosystemic interactions with various other-than-human actors – such as *rievssatcizážat* (*Phylloscopus trochilus*), *beštorat* (*Motacilla alba*), *niitocivkkánat* (*Anthus pratensis*), *vintánat* (*Fringilla montifringilla*), a duet of *bihčosat* (*Pluvialis apricaria*) that prominently enters after the eighth minute, and a concluding gurgling creek – it is particularly striking how the swarm’s droning sound «undulates» around the microphones, following Ole Larsen’s movements and creating a «sort of harmony or counterpoint to [his] *luođit*, as if the mosquito

²⁵⁴ Johan Sara Jr., oral teaching (personal communication), March 6, 2023, Máze, Sápmi.

²⁵⁵ Ole Larsen Gaino, “Geassi (Summer)”, in *Ludiin muitalan* (2009): <https://www.youtube.com/watch?v=mESw-RDcbfo>

swarm also intended to participate. And they did participate, together with Lásse Ovlá». ²⁵⁶

The mosquito sounds collected that day were later sampled by Johan Sara Jr. and processed in the third track of his solo album *Transmission – Rievdadus* (2010). The track is called *Guvttiin soppiin – Two Sticks*, a title that, after the previous discussion, should be self-explanatory. ²⁵⁷ It sonically narrates the arrival of the mosquitoes in the locality of Máze:

It is a midsummer night, the 24th of June. The mosquitoes are awake and very hungry. So they are coming with “two sticks”, that is a Sámi way to say that they leave marks on your skin, just as people do to the ground, or to the snow when they walk with their ski poles. ²⁵⁸

The sampled sound of the mosquito swarm is heavily processed and given a more defined temporal structure using sequencers. From the second minute on, in the right channel, a sound morphologically similar to the swarm’s whining becomes increasingly perceptible. These are human vocalizations, barely recognizable due to the intense degrees of vibrato, digital distortion and saturation which emphasize the harmonics in Johan’s voice that match the frequencies of the mosquito’s wingbeat. Simultaneously, the mosquito sounds are submitted to a granular synthesis process which progressively aligns them to the *luohti* melodic contour.

The effect is an almost indistinguishable blending of human and mosquito voices into a single *luohti*, which becomes fully manifest only around the end of the fourth minute. Akin to the vocal phonomorphism encountered in Mai Britt’s *čuoika luohti*, Johan Sara’s sonic and vocal experimentation can be viewed as an exemplary case of virtual phonomorphism, where «the transition» between the *luohti* “of” the mosquito and the *luohti* “from” the mosquito «is mediated by technology». ²⁵⁹ The transition between human and other-than-human voices does not occur *unmediated*, as per the traditional acoustemology of *juoiggus* advocated by Mai Britt Utsi. However, despite the phonomorphism is not fully achieved through the *juoigi*’s vocal skills alone, it is nevertheless perceivable by the listener in the final outcome. As Thomas Hilder aptly summarizes,

the digital manipulation of sounds [...] suggest the enactment of “telepresence,” whereby the listener is transported to a Sámi environment through sonic simulation. The apparent increasing opportunities of sonic verisimilitude offered by digital technologies enhances listeners’ experience of these virtual soundscapes. (Hilder 2017: 191)

²⁵⁶ Johan Sara Jr., oral teaching (personal communication), March 6, 2023, Máze, Sápmi.

²⁵⁷ Johan Sara Jr., “Guvttiin soppiin – Two Sticks”, in *Transmission – Rievdadus* (2010): https://www.youtube.com/watch?v=V4rYCBRs_MY&pp=ygUfR3V2dHRpaW4gc29wcGlubiDigJMgVHdvIFNoaWNrcw%3D%3D

²⁵⁸ Johan Sara Jr., oral teaching (personal communication), March 6, 2023, Máze, Sápmi.

²⁵⁹ Johan Sara Jr., oral teaching (personal communication), April 29, 2021, Máze, Sápmi.

In this sense, the introduction of samples and the use of digital sound-altering tools have positioned *juoiggus* at the forefront of developing new forms of orality, and consequently, new ways of understanding the world and its ecosystems. These directions too, as stressed by Johan Sara, go «well beyond music» and open up to the more-than-musical, offering renewed opportunities to «hear *luodit* in their environment»:

NR: Do you think that digital music production could, in a way, enhance the already evocative power of the joik and its reception?

JS: I think they are two disting disciplines, but they can live in symbiosis. If you want sound production to be as evocative as joik, then you have to master the right techniques, just as you have to do with your voice in joiking. In the traditional Sámi way of thinking, joik can and should stand alone by itself, but that's a really interesting question because I never thought about joik and digital music production in these terms. It feels like they are disciplines that can belong to each other and that together can develop new ways of understanding. For me, as a composer, it's very important to show this side of Sámi culture: we desire to preserve the traditional ways but we are also positively eager to develop new ways, adapting to current opportunities.²⁶⁰

With this philosophy deeply anchored in traditional acoustemology yet dynamic and experimental in its pursuit of novel creative solutions, Johan Sara advised me to explore artistic methods for working with and analyzing my field recordings to address the challenges that hindered the detection of morphological correspondences between human and mosquito voices.

One method I initially considered was the use of FFT-based pitch shifting, a technique familiar to many Sámi artists and producers working with environmental sounds. Exemplary is the song “Njama njama” from the album *Viidon Sieiddit* (2019) by Sámi rapper Áilu Valle, where pitch shifting is applied to mosquito sounds in the refrain, creating a melodic inflection in the rap beat from the original sample. However, after a thorough evaluation, I opted to discard this approach, as it would have introduced an excessive degree of artificial manipulation by stretching the sample and reassembling its frequencies to fit a predetermined melodic line.

Similarly, traditional granular synthesis techniques, which leave decisions regarding the duration, density, distribution, and organization of the grains entirely to the composer (cf. Truax 1988), did not align with my objective of maintaining a more ecologically informed and less anthropocentric approach to sound manipulation in the context of my analysis. As an alternative solution, Damián Keller and Barry Truax have theorized an ecologically informed granular synthesis in which

the grain distributions and sample-based processes have to be controlled from parameters defined by a higher level transformation. This

²⁶⁰ Johan Sara Jr., Oral teaching (personal communication), April 29, 2021, Máze, Sápmi.

transformation needs to be constrained to a finite event which is feasible, at least in theory, within our day-to-day environment. (Keller, Truax 1998: 2)

In other words, as the authors describe, this approach involves working «from a representation which parses time into ecologically-constrained events», where the environment itself informs the organized transformation of the samples, thereby establishing novel ecologically meaningful samples (ibidem).

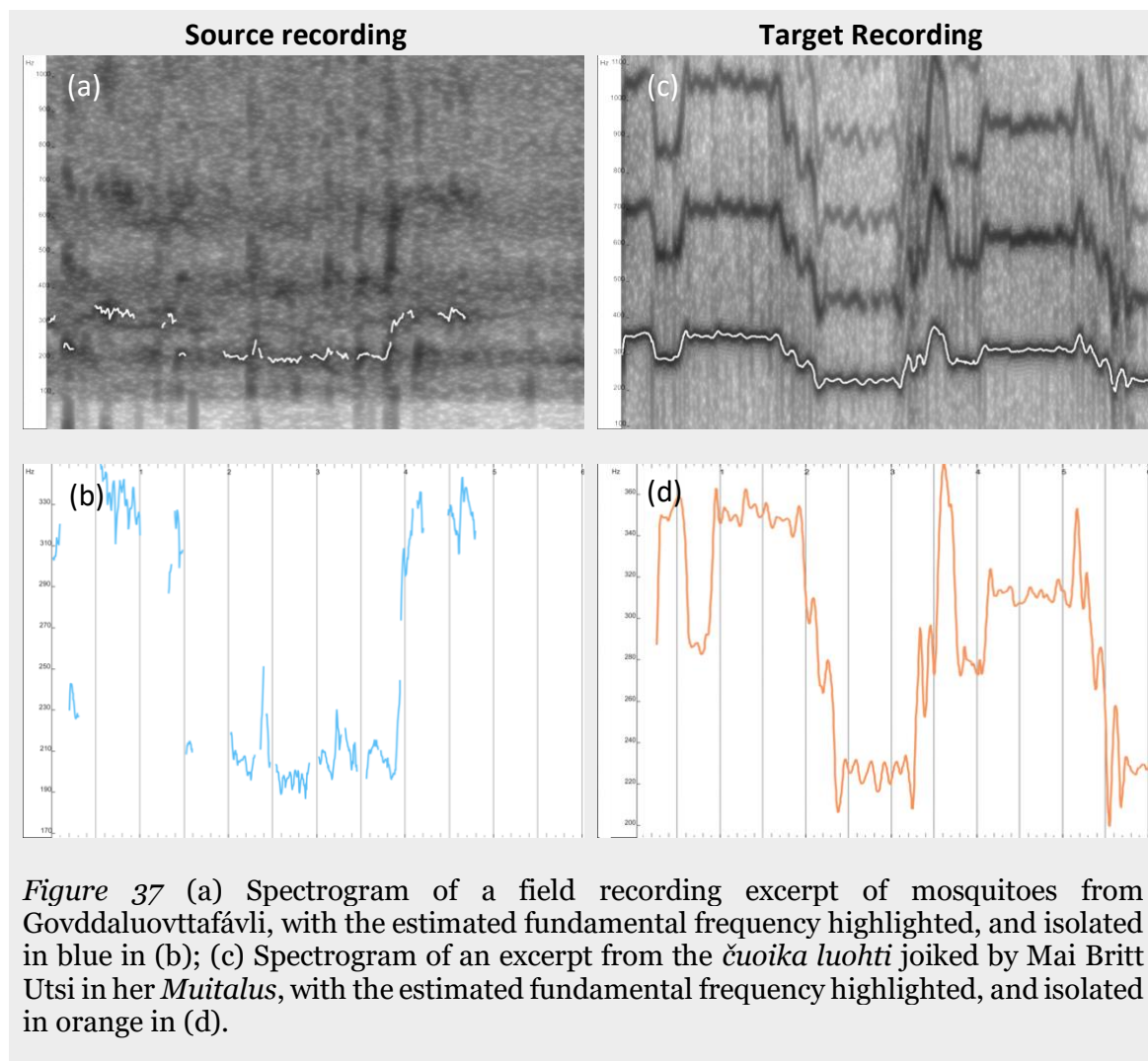
As I considered following the direction proposed by Keller and Truax, although with reservations about the final rendition of the resulting sample's timbre, I came across a series of novel studies focused on algorithms for voice cloning implemented by deep learning models for voice synthesis (Driedger J. et al. 2015; Napolitano 2020). This finding shifted my analytical scopes towards the implementation of a mosquito voice model from my field recordings to be encoded over a traditional rendition of the *čuoika luohti*. The hypothesis was that this method would allow for matching the melodic contour of the *luohti* while preserving the swarm's original timbre and density, thereby simplifying the detection of melodic correspondences between the more closely resembling spectrograms of the original field recording and of the newly synthesized sample. The latter process could be further enhanced through an advanced audio synthesis technique known as audio mosaicking, described by Driedger as follows:

Given a target and a source recording, the goal of audio mosaicing is to generate a mosaic recording that conveys musical aspects (like melody and rhythm) of the target, using sound components taken from the source. (Driedger et al. 2015: 350)

Driedger specifically applied algorithms for non-negative matrix factorization (NMF) to automatically generate audio mosaics through a matrix that, when multiplied with the spectrogram of the source recording, resembles the spectrogram of the target recording. In their experiment, however, the authors sought to go beyond mere rhythmic-melodic correspondences, and rather generate audio mosaics that also adequately preserve and reflect the timbre of the source – a goal that aligned precisely with my expectancy (ibid: 55). Compared to plain pitch shifting, granular synthesis and earlier audio mosaicking techniques, Driedger's novel approach employs an iterative learning model that through sparse diagonal structures in the activation matrix better retains the source's timbral characteristics. Therefore, after adapting Driedger's algorithm to fit my research objectives and parameters, I implemented it in MAX, a coding environment particularly useful for visualizing and interacting with algorithms which I have been only beginning to explore.

The code requires two inputs: one for the source recording and one for the target recording. Given a human rendition of the *čuoika luohti* as target recording – in this case, the interpretation recorded with Mai Britt Utsi – and the buzzing sound

of a mosquito swarm as the source recording – from the field recordings carried in Govddaluovttafávli –, a matrix activates the generation of a new audio file that preserves the morphology of the *luohti* while also maintaining the timbre and spatial-temporal density of the mosquito swarm (Audio 8).



I recently presented the initial results of this experiment at the Eighth International Conference on Analytical Approaches to World Musics (AAWM 2024). While the first attempts still exhibit noticeable acoustic artifacts such as stuttering and phase cancellations – due to the limited diversity in the training data, which can be improved through data augmentation, adjusting the number of learning iterations, or refining the time-sparsity of the computed samples –, the sonic visualization of the newly synthesized *čuoika luohti* enabled the review of some initial insights. The spectrogram of the target recording (Mai Britt’s *čuoika luohti*) clearly exhibits a timbral balance and pitch contour linearity consistent with Mai Britt’s individual voice and the *luohti* morphology (Figure 37a–b). In contrast, the spectrogram of the source recording reveals significant and abrupt modulations in both amplitude, pitch and density, characteristic of the uneven distribution of a crowded mosquito swarm around the microphones (Figure 37c–d). The mosaic computed through

Driedger's procedure retains spectral density and pitch modulations that are ecologically informed by the swarm's natural timbre and spatial-temporal characteristics (Figure 38a), while simultaneously preserving the melodic content and temporal structures of the *čuoika luohiti* (Figure 38b).

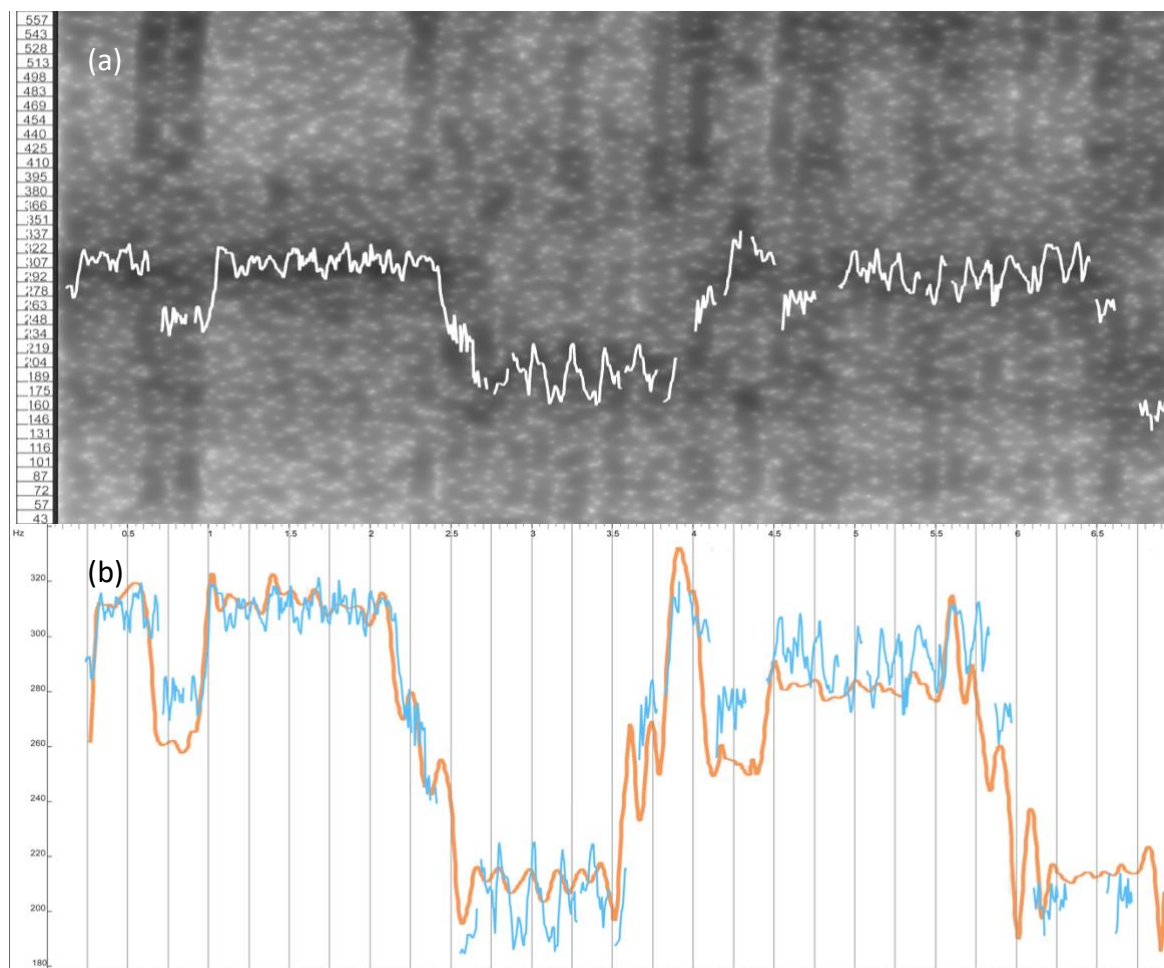


Figure 38 (a) Spectrogram of the audio-mosaic computed from the voice of the Govddaluovttafávli's swarm (source) and Mai Britt Utsi's *čuoika luohiti*, with the estimated fundamental frequency highlighted; (b) Overlay of the estimated fundamental frequency of the newly obtained audio-mosaic (in blue), and Mai Britt's original *čuoika luohiti* (in orange) – the latter being pitched down 50Hz to facilitate the comparisons between the two profiles.

Beyond achieving a speculative model of how a mosquito swarm might sound joiking a *čuoika luohiti*, the resulting mosaic – whose spectrogram now closely resembles that of the source recording of Govddaluovttafávli's mosquitoes – facilitates the identification of morphological patterns that could support the understanding of an ecosystemic and aesthetic coevolution, as well as mutual exchange of *luodit* between humans and mosquitoes (cf. Feld 1996).

The ever-growing recognition of other-than-human beings as musical actors within musicological disciplines reveals ecological horizons that, as of yet, lack effective and robust analytical methods that allows for transcending a cognitive

framework limited to nature-culture binomials (Martinelli 2011). While it cannot fully provide a biocentric approach to the analysis of how musical the mosquito is, the audio mosaicking technique inspired by Driedger's procedure sought biocultural alternatives to interpretive tools encultured by colonial aesthetic and scientific assumptions where music is inherently cultural and, as such, distinct from nature (Kanngieser 2023: 692). These assumptions have historically inspired "starving" analytical approaches to *juoiggus* that prioritize extraction, dissection and exhaustion of the "musical" object without consulting the local acoustemologies to assess the legitimacy or even relevance of these methods for local stakeholders (Robinson 2020). Despite audio mosaicking as a procedure and analytical tool does not directly originate from Sámi acoustemology nor sound experimentalism, a creative, art-based approach to the analysis of my own field recordings was strongly encouraged by my Sámi mentor and other fieldwork collaborators, and the final decision to employ an ecologically informed audio mosaic technique was primarily inspired by Sámi ecological knowledge and by the biocultural history of this small insect, which is undeniably musical and – as a skilled *juoigi* – more-than-musical.²⁶¹

Through listening dialogically to the final outcomes of the experiments emerged how the mosaic better retains the acoustic fingerprint of the mosquito, offering a glimpse of its more-than-musical subjectivity. While it is now possible to affirm – answering Mai Britt's provocative question – that melodies can indeed be heard in the voice of mosquitoes, doubts emerged regarding whether *čuoikkat* perform the same *luohti* that the Sámi associate to this insect, or perhaps other known or yet to discover *luodit*. And should this be the case, which *luodit* can people hear and learn in the melodic voice of mosquitoes? These reflections clearly highlight the need for further collaborative research with human and other-than-human communities in Sápmi.

Indigenous onto-epistemologies and artistic expressions offer valuable inspiration and contributions to the evolving discourse on multispecies musicality. Their role in the mediation between anthropocentric and biocentric understandings of the world is carefully highlighted by Johan Sara Jr., who discusses the responsibilities of traditional *juoigit* and Indigenous contemporary artists in giving voice to the land in rapidly changing times and environments:

Of course in my works it's not just nature speaking. My own voice is present, but as a human being, I am also part of nature. We are also part of the environment. We are part of a larger whole, in symbiosis with other organisms and with the land. There are deeper relationships that we often overlook or fail to hear. And in *juoiggus* or in music, by taking nature's perspective, it becomes possible, at least, to try to bring these

²⁶¹ Johan Sara Jr., personal communication, June 30, 2023, Áltá, Sápmi; Roman Iakovlev, personal communication, August 12, 2023, Guovdageaidnu, Sápmi; Mai Britt Utsi, personal communication, August 14, 2023, Guovdageaidnu, Sápmi; Ellen-Marie Jensen, personal communication, May 9, 2024, Bologna, Italy.

relationships to the surface [...]. Therefore, the joiker and artist's responsibility is paramount. I am telling the world what is happening... How it is happening... Why it is happening. You know, it's a big responsibility, especially with these global changes. I do really think we should sit down and listen more carefully to what the world is telling us. And if someone is able to do that, it becomes their big responsibility to convey to the world what the world has told them.²⁶²

Čuoika lea musihkkara mii viežžá báلكás (Ánde Somby)²⁶³

The consciousness that through *juoiggus* people can “adopt nature’s perspective” and act as intermediaries for other-than-human messages also surfaces in the experience of a third mosquito advocate in Sápmi, Ánde Somby, who remarks how «through the *noaidevuohta*, our Sámi shamanistic thinking, we are able to carry the most profound knowledge when approaching something or someone through *luohti*».²⁶⁴ This approach becomes a near moral imperative when it involves giving voice to those subjectivities that «in our society of nature» are often misunderstood, marginalized or even exterminated:

I think, for example, the mosquito. If you look at the ecological relationships that people weave with the environment, it is evident that as humans we often discriminate between “nature” and what can be referred as anti-nature.²⁶⁵

The notion of “anti-nature” as proposed by Ánde Somby diverges from the traditional philosophical and sociological discourse, which frames the opposition between environment and civilization, instead positing nature and anti-nature as a polarity in the human perception of the same reality (cf. Ōhashi 2014). We perceive nature in things that we tend to appreciate dispassionately, «like a beautiful sunset or the striking sight of a gracious animal crossing the road», while anti-nature classifies things that are equally part of our environment, yet often regarded as undesirable nuisances or threats:

My favourite example is seagulls and rats that roam the city, which most people wish to get rid of because they are a nuisance to the urban environment. Starting a war against anti-nature, however, develops into a war against the nature that we often fail to see in them. And the mosquito example is also very fitting, as she is often perceived as anti-nature. She comes with this little sting that may cause pain and worry about potential allergic reactions to the substances she injects into our bodies, yet she really needs to fulfil the work necessary for her survival. One of her tasks in our world.²⁶⁶

²⁶² Johan Sara Jr., oral teaching (personal communication), April 29, 2021, Máze, Sápmi.

²⁶³ “The mosquito is a musician who earns a living”

²⁶⁴ Ánde Somby, oral teaching (personal communication), May 19, 2021, Sirbmá, Sápmi.

²⁶⁵ Ibidem.

²⁶⁶ Ánde Somby, oral teaching (personal communication), May 19, 2021, Sirbmá, Sápmi.

The understanding of mosquito as anti-nature is mirrored by the second major declination of mosquitoes emerged from the travel narratives of foreigners in Sápmi, where this insect is waged war against as a *natural enemy*. Even *daččat* – those who have long settled on Sámi ancestral lands – are still «bothered by mosquitoes, and strive, cursing to get rid of them» (Valkeapää 1971 [1983]: 22). Just as Sámi ontologies counter the narrative that reduces mosquitoes to *insignificance*, they also challenge and heal the declination of this insect as mere anti-nature. Ánde's words resonate with the «deep philosophy» of mosquitoes advocated by Mai Britt Utsi (see above), which suggests that the annoying aspects of this insect are inseparable from the ecological benefits we indirectly derive. From this relational understanding, we «should learn how to live with them»²⁶⁷ (cf. Stepan 2022: 74; Segata 2022: 170). To advocate a shift in perspectives on the widely conflictual human-mosquito relationship, Ánde Somby embraces the very perspectivism intrinsic to what he calls «the shamanistic view» of *juoiggus*.²⁶⁸ Rather than knowing the mosquito through objectification or mythic discourse, *noaidevuohhta* presupposes a mode of knowing through becoming, where *juoiggus* allows humans to embody the perspective of the other-than-human subjectivity being sought for understanding (Somby 1995; Helander-Renvall 2010: 50; Porsanger 2012: 42; Aubinet 2020a: 117; see also Viveiros de Castro 2004: 468):

As a human being, I'm bound to this body and I perceive the world as such. But, through joiking, I get to perceive the world as a mosquito to understand why she behaves like she does. And through joiking I can also be perceived by other humans as a mosquito, conveying her messages.²⁶⁹

Ánde Somby has developed this intersubjective approach with some of the most symbolic Sámi *eallit*, building a repertoire entitled “The animals inside the human and the human outside the animals”. In his public performances, beside joiking the crow, the salmon, the wolf, along with other animals, he verbally contextualizes the ecological roles these other-than-human beings play in our world and conveys the specific messages he received by taking each of their perspectives. During a Sámi *juoiggus* event I curated with the Intercultural Institute for Comparative Music Studies of the Fondazione Giorgio Cini in collaboration with the Sámi Pavilion at the 2022 Venice Biennale, Ánde performed this repertoire, including his version of the *čuoika luohiti*, which differs from the one presented by Mai Britt Utsi. Before performing, he briefly introduced the audience to who they were about to hear:

The next animal is... The mosquito! [chuckles from the audience] And I have a very personal story about this animal, because I have always been thinking that somehow mosquitoes are skilled musicians in the respect that they create this beautiful, curious sound. And the deal is that if you want to listen to their music, you have to pay a little fee with a drop of

²⁶⁷ Mai Britt Utsi, oral teaching (personal communication), July 3, 2023, Guovdageaidnu, Sápmi.

²⁶⁸ Ánde Somby, oral teaching (personal communication), May 19, 2021, Sirbmá, Sápmi.

²⁶⁹ Ánde Somby, oral teaching (personal communication), May 19, 2021, Sirbmá, Sápmi.

your blood. I'm aware that this micro-concert happening around my ears isn't free, and so I think: "Ok, I have been to concerts and paid musicians with money... So why not pay this mosquito the small fee she deserves?"²⁷⁰



Ande Somby

1 Jul 2022 · 🌐



Musihkár viežžá báلكkás. /// En musiker plukker opp sitt honorar. /// A musician picking up the fee.

See translation



3 comments 3 shares 612 views

Figure 39 Mosquito feeding of Ánde Somby's hand. Frame from video publicly posted on Facebook with the caption "A musician picking up the fee" (July 1, 2022).

Apart from openly and ultimately confute – along with the cases presented above – the third and final macro-declaration of mosquitoes as a mere *unmusical nuisance*, this brief *muitalus* highlights the process of learning the *čuoika luohti* through prolonged and attentive listening practice, implemented with a broader (and rather patient, I should add) embodied experience. To catch the *luohti* of the mosquito, Ánde refrained from killing any mosquitoes for years, allowing them to «joik into [his] ear and willingly getting stung» to experience both their acoustic and tactile presence (cf. Aubinet 2020a: 186).²⁷¹ This embodied experience translates into his performance, where Ánde Somby's voice seeks to achieve phonomorphism through a skilled use of falsetto that blends with the high-pitched tone of the mosquito – *Ándde jietna šaddá čuoikka jietna*. This process of *becoming* is further accomplished through a largely stable melodic profile centered on a single note – exception made for brief excursions and embellishments that do not exceed a sixth

²⁷⁰ Ánde Somby, oral teaching (personal communication), October 20, 2022, Venezia, Italy.

²⁷¹ Ánde Somby, oral teaching (personal communication), May 19, 2021, Sirbmá, Sápmi.

from the central tone – which allows the *luohti* to reach the audience as the recognizable undulating yet obstinate pitch that a mosquito emits when flying close to one's ear.²⁷²

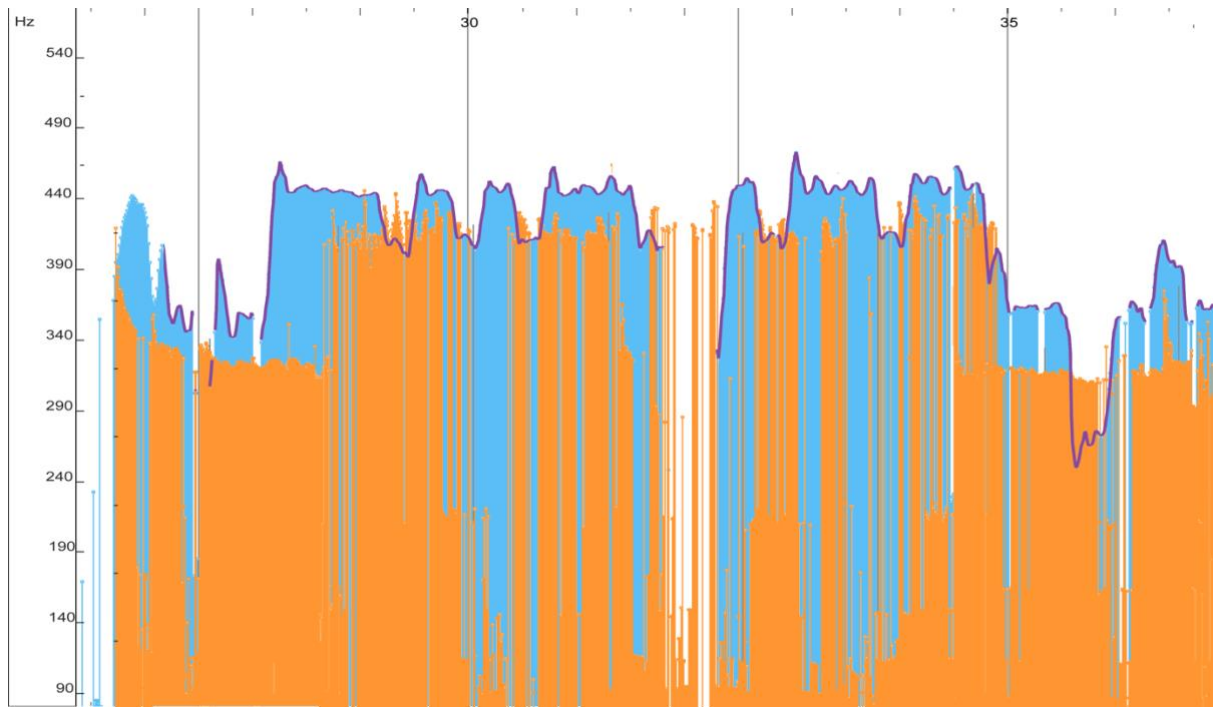


Figure 40 Comparison between the stem plot of the estimated fundamental frequency from Ánde Somby's *čuoika luohti* (in blue; *luohti* highlighted in purple), and from an individual mosquito's wingbeat (in orange) recorded through the 'cup method' (cf. Sinka et al. 2021).

By reaching the audience's hearing as a mosquito, Ánde can convey *čuoika*'s message through a *dajahus* which

establishes the existential logic of the mosquito within nature. Through her own voice, the mosquito signals exactly when she is arriving and what she is going to do. And by doing so, she says:

I sting you.

I will sting you because blood is so sweet.

I sting you.

I sting you because it is through this little sting

that you will notice you are alive.

And the day crows will turn white,

I will be done with my task:

To guarantee the continuance of life.

²⁷² The *čuoika luohti* joiked by Ánde Somby in Venezia is accessible on YouTube: <https://www.youtube.com/watch?v=NI4Dtn9TJ6U&t=5s> (starts at 3'27")

This way, the mosquito can teach us about the ecological role they play on the stage of existence.²⁷³

A listener fluent in *davvisámegiella* would discern an additional layer within this zoomorphic *luohti*, as its *dajahus* is delivered in the first person from the mosquito's perspective, facilitating communication by the insect through a human body and language (cf. Aubinet 2020a: 117). Echoing Johan Sara's reflections, Ánde Somby acknowledges the moral imperative of *juoigit* and Indigenous artists as a bridge between plural and diverse subjectivities, where the perspectivist and the intercorporeal qualities of *juoiggus* could serve to ensure not only an extended and more meaningful sense of multispecies responsibility, empathy and ethics, but also a biocultural care within which humans' wellbeing depends on the wellbeing of even the least desired intercorporeal Other (cf. Cianferoni 2019: 257):

Even for the trained ear, it is difficult to hear the difference between an animal's yoik and a person's yoik. the reason is simply that people, animals and land are not as distinct in the Saami mind as in the western European mind. Ethics that apply to fellow humans also apply to a great extent to animals and land, or fellow animals and fellow land, so to speak. (Somby 1995: 17)

Classifications of “nature” and “anti-nature”, in their declination offered by Ánde Somby, are contextual to and ecologically informed by defined onto-epistemologies. As Áilu Valle aptly summarizes, «in the Sámi perspective, the mosquito represents nature and you shouldn't eliminate them, because they are part of a larger balance».²⁷⁴ What is perceived as a dear companion to some, may be an insignificant nuisance to others, but it is the posture adopted in relation to these “nuisances” that ultimately determines our responsibility towards the biocultural sustainability of human-mosquito entanglements and broader ecosystems (cf. Hohti, MacLure 2022: 327).

Leatgo don ustít vai vašálaš? (Áilu Valle)²⁷⁵

Our fourth and final mosquito advocate, Áilu Valle explores these dual postures in “Čuoikkat”, the seventh track of his album *Viidon sieiddit*, a transmedia project resulting from a scientific and artistic collaborative research led by the University of Lapland and entitled *Viidon Sieiddit – New Dimensions of the Sámi Relationship to Nature* (2016-2019). “Čuoikkat” is a spoken word track characterized by a polyvocal narrative where different voices and perspectives – both human and other-than-human – are intertwined and distinguishable via their unique timbres. The spoken word is accompanied by a soundscape composition of «summery insect

²⁷³ Ánde Somby, oral teaching (personal communication), May 19, 2021, Sirbmá, Sápmi.

²⁷⁴ Áilu Valle, oral teaching (personal communication), May 7, 2021, Avvil, Sápmi.

²⁷⁵ “Are you a friend or an enemy?”

voices» recorded by Niilo Rasmus produced by Raquel Rawn.²⁷⁶ Through these sounds, the artists sought to immerse the listener in an unsettling environment, evoking the «intense feeling of being surrounded by blood-thirsty mosquitoes».²⁷⁷ Different audiences react to this environment in varied ways, as Áilu Valle notes:

The mosquito here represents a friend for the Sámi, being an inseparable companion in the summer and playing an important role in the ecosystem, but it also represents great irritation to others.²⁷⁸

This epistemic ambiguity is conveyed in the soundscape through two distinct human-mosquito interactions: *false* vocalizations, which – as in Ánde’s *čuoika luohti* – establish a form of sonic kinship with the insect, and the dry sound of swatting in the act of fending off the persistent mosquito. A dual yet concurrent narrative – oscillating between a «flailing» and «welcoming» attitude – also emerges through the spoken word lyrics, culminating in the symbolic dilemma that questions the mosquito’s status as a friend:



<i>Miii hii iii hii hi hiii</i>	Miii hii iii hii hi hiii ²⁷⁹
<i>Fáippun, fáippun, fáippun,</i>	I flail, I flail, I flail,
<i>fáippun</i>	I flail
<i>Fáippun, fáippun, fáippun,</i>	I flail, I flail, I flail,
<i>fáippun</i>	I flail
<i>Maid don gáttát</i>	What do you think
<i>Leagot ustit dutnje</i>	Is it a friend to you
<i>Leatgon ustit munnje?</i>	Are you a friend to me?
<i>Ále šat fáippo</i>	Don’t flail anymore
<i>Ále šat fáippo</i>	Don’t flail anymore
<i>Boađe deike...</i>	Come here...
<i>Njama, njama</i>	Suck it, suck it
<i>Njama, njama</i>	Suck it, suck it

Commenting on this passage, Áilu Valle describes how a human-mosquito friendship is established when the narrating voice asks *čuoika* to come closer (*boađe deike*) to carry its task through a *luohti* (*njama, njama*) – a reflection of «the peaceful attitude of Indigenous peoples towards Nature». Conversely, the «hostility and irritation with mosquitoes represents the colonial attitude where

²⁷⁶ Valle 2019b.

²⁷⁷ Áilu Valle, oral teaching (personal communication), May 7, 2021, Avvil, Sápmi.

²⁷⁸ Ibidem.

²⁷⁹ In quoting the lyrics and translation of “Čuoikkat”, I follow their original transcription in Valle (2019)

Nature needs to be killed piece by piece».²⁸⁰ From this narrative, Áilu «flip[s] the script» and assigns the mosquito a symbolic polyvalence, framing this animal both as oppressor and oppressed. On one side of the polyvalence, the act of sucking blood is metaphorically transferred to the ravenous machines that drains Earth's resources:

Oainnátgo mo don njamat dán Do you see how you suck
eatnama.. this Earth...

Oainnátgo mo don njamat dán Do you see how you suck this
eatnamaaaaaa Eeeeeaaaarth...

The subsequent high-pitch whines grow increasingly obstinate and determined, yet each of the vocal resurgence is swiftly silenced by firm slaps:

*Hu wu hu hujuhuju - *doašk** Hu wu hu hujuhuju - *slap*

*Huju - *doašk** Huju - *slap*

*Huju - *doašk** Huju - *slap*

*Hujuhuju - *doašk** Hujuhuju - *slap*

Goiku, varra goiká Thirst, the blood dries

Goaiku, goiku Drips, thirst

It is a struggle for existence where, on the other end of the polyvalence, the mosquito symbolizes the fragility but tenacity of «animals and Indigenous peoples as minorities» enduring the violent manners of their oppressor (ibidem):

Eat mii leat láven It's not in our manners
fáiput... to flail...

Muhto dat čuđit gal But the persecutors
goddimin jámma unnibuid constantly kill the little ones

The rapper's resolute and clear tone has now taken over the stage, as the track escalates towards a fervent conclusion, where Áilu Valle «flip[s] the script once more» and returns to the first image of extractive industry as a bloodsucking plague upon Earth, closing with two provocative questions (ibidem). The first, admonitory in tone, draws a parallel between the loss of patience people experience when tormented by mosquitoes and the potential consequences when «Mother Nature» eventually retaliates against (or “flails at”) the «representatives of colonial and capitalist culture who are sucking the blood of Earth» (ibidem). Finally, based on the differing scales of power between these two bloodsucking agents and the respective consequences they carry, Áilu Valle revisits the original dilemma, questioning who the real “anti-nature” is:

²⁸⁰ Valle 2019b.

<i>Naba go eanni</i>	What about when the Mother
<i>de dolká daid</i>	gets fed up with these
<i>varanjammiide?</i>	bloodsuckers?
<i>Jeara alddát,</i>	Then ask yourself,
<i>leatgo don ustit vai vašálaš?</i>	are you a friend or a enemy?

Like the other mosquito advocates presented in this chapter, Áilu Valle recognizes both the nuisance and the partnership in *čuoika* (cf. Ford et al. 2022: 134). He leverages this copresence in his sound art, with the responsibility of building and conveying environmentally critical messages that from the voice of such tiny yet fierce and resilient insect – fittingly dubbed Sámi Airforce – amplify a broader, interspecies stewardship of ancestral lands and their inhabitants (cf. Valkonen 2023: 20; Gorlewski, Portfilio 2012).

Tormented by excavators disfiguring her *duoddarat*, irritated by chainsaws clear-cutting her *meahcit*, infected by mineral waste injected in her *vuonat*, suffocated by turbines that seize her *biegga*, Eadni flails with increasing force to swat away the nuisance brought by her most pervasive and distressing pest, humanity. Just as we wage war against mosquitoes as a whole, without recognizing that only a small percentage of these dipterans pose an actual threat, Earth’s retaliation against humanity spares no consideration for which bio-politically, -culturally, or -historically situated people contribute to disrupting her well-being (Haraway 2015; cf. Moore 2015). This is especially evident in the Arctic, where environmental fragility is most acutely experienced, and where the rate of warming is more than twice the global average (Post et al. 2019; Sámiráđđi, Sámediggi 2023).

It remains unclear how mosquitoes, midges and other arctic flies are responding to these rapid transformations, but as ectotherms they «are particularly sensitive to rapid environmental change» (Koltz, Culler 2021: 75). Disruptions in their life cycle could lead to the spread of vector-borne diseases (Sámiráđđi, Sámediggi 2023: 54, 81; Culverwell, Vapalahti 2023), while also having drastic consequences for biodiversity, the functioning of the entire tundra ecosystem and, as a result, culturally and economically significant activities such as reindeer herding (Näkkäljärvi et al. 2022; Sámiráđđi, Sámediggi 2023: 92).

As Farina underscores, changes in soundscapes often accompany or even precede changes in the landscape (Farina 2015: 54). Monitoring the echosystemic presence of *Culicidae*, *Simuliidae* and other *Diptera* – that constitute the most abundant group of fauna in the Arctic (Wielgolaski 1975; Carrier 2017: 8; Koltz, Culler 2021: 78) – can offer key indicators of environmental change in the region (Danks 1992; Loboda et al. 2018; Sinka et al. 2021; Erbe, Thomas 2022). But do we truly hear what the mosquito is “buzzing” about?

Technological advancements have equipped us with tools to investigate how mosquitoes perceive and interact with their environment (Cornell University 2009). Yet, a comprehensive understanding of their perspective remains elusive (Martinelli 2010: 83). Our ability to know and understand mosquitoes is obfuscated by an ontology that sharply separates them from humans. Like ticks, cockroaches, houseflies and other insects, mosquitoes are framed as fundamentally *inhuman*, occupying a space and time on «the margins between life and death, organic and inorganic, human and nonhuman, conscious and unconscious» (Hohti, MacLure 2022: 328; see also Ford et al.: 123). Our capacity to truly *hear* mosquitoes is also deafened by an epistemology that predominantly links their sensory presence to irritation – both physical and mental – and fear, because of their potential lethality. This epistemic frame comprises an acoustemology that invariably identifies mosquitoes' high-pitched whines as a disturbance to quietude, an obstacle to restful sleep, and a sound that is degraded to the periphery of aesthetic considerations – even when artists incorporate it in musical works²⁸¹ (cf. Rothenberg 2013; Hawkes, Hopkins 2022: 20; Morrison, Lemke 2022: 145).

Within this interspecies relationality, the mosquito is cast as a “radical otherness” that challenges the very foundations of an alleged “democracy of species” paradoxically sketched from an anthropocentric stance (Braidotti 2002; Hohti, MacLure 2022; cf. Kimmerer 2013: 346). As Lisa Schonberg observes, we tend to contemplate «sentience in animals when considering how we value their worth and protection» (Schonberg 2022: 23). Ecofeminist research describes this valuation in terms of an anthropic exceptionalism where «human beings are paradigmatic ethical objects» while «other life-forms are valuable only insofar as they are seen as similar to humans» (Cuomo 1998: 106). According to Val Plumwood,

Because the other is to be treated as not merely different but inferior, part of a lower, different order of being, differentiation from it demands not merely distinctness but radical exclusion, not merely separation but hyperseparation. (Plumwood 1993: 49)

According to the aforementioned onto-epistemological gap that enforces the hyperseparation between humans and mosquitoes, the latter are reduced to “anti-nature”, misunderstood as deadly predator – though we battle diseases, not their carriers (Hall, Tamir 2022: 5) –, or swatted as a mere nuisance. Ultimately, mosquitoes are relegated to the margins of multispecies connections, even becoming the root of a «wish for total extermination» which drives a significant belligerent side of scientific efforts (Hohti, MacLure 2022: 327; Winegard 2019: 1).

Transposed onto a discourse on coloniality, this hyperseparation mirrors the settler tendency to «create the image of separate, discontinuous natures and orders

²⁸¹ David Rothenberg, personal communication, August 29, 2024, online.

of being» (Plumwood 1993: 49). Borrowing once more from Áilu Valle’s allegorical storytelling, much like mosquitoes, Indigenous peoples have been positioned as “radical otherness” within a colonizing ontology; their voices are systematically placed at the margins or excluded from political decision-making processes, while their ways of being and knowing struggle for recognition within dominant scientific and epistemological frameworks. Building on this ecofeminist critique, Pedersen and Pini pose the rhetorical question of whether, «[i]n the midst of posthuman entanglements and boundary-deconstruction», we «really have listened carefully enough» (Pedersen and Pini 2017: 1052). Even when we attempt to grant it proper attention, within an anthropocentric epistemology the mosquito is known through a process of objectification that reduces its *voice* to mere acoustic data, stripping it of unique aesthetics, messages and stories (cf. Carrier 2018). But “can the mosquito speak?”²⁸²

This chapter has sought to demonstrate how Sámi acoustemologies and histories of listening offer a compelling response to this question: not only the mosquito can speak, but the mosquito can joik beautiful *luodit*, and through *luohiti*, the mosquito can teach different stories. Margaret Kovach aptly observes how «stories hold within them knowledges while simultaneously signifying relationships», constantly reminding us «who we are and of our belonging» (Kovach 2009: 94). As skilled listeners and interpreters of a multispecies storytelling tradition – *juoiggus* – many Sámi have taken on an advocating role towards the messages learned from *čuoika*, amplifying these stories through a vocal practice that, in its human rendition, sounds like music. Yet beyond that, *juoiggus* fosters sonic kinships and mutual understandings with this “significant otherness” among other Earth beings (cf. Haraway 2003). Through his research and storying, Ánde Somby acutely notes how *juoiggus* is guided by an acoustemology that challenges encultured ways of knowing based on linear objectification (Jensen 2012: 51; cf. Kanngieser 2023), rather manifesting as a circular act of knowing a significant otherness through becoming and belonging:

In a manner of speaking, a yoik has no object. In fact, it is altogether impossible to envision yoik in terms of subject and object. The yoiker may perhaps be considered an integral part of the yoik, and this has interesting connotations for the debate about objectivity in research. (Somby 1995: 17)

As a biocultural approach that adopts the perspective of the subject to be known and mediates it through echosystemic reciprocities, *juoiggus* emphasizes a more affective, ethical and sustainable alternative to the epistemic understanding and acknowledging of voices beyond human (Valkeapää 2001; cf. Kimmerer 2013: 112; Kvalsvik 2019: 66-67). While limits in this approach to mosquito voices are argued for contextual knowledge and personification being unable to fulfil the ambitions

²⁸² Mitchell 2002.

for a purely biocentric approach to understand mosquitoes, *juoiggus* as multispecies storytelling places at the center an organism that dominant anthropocentric ontologies have historically placed at the margins as insignificant being, as killable enemy, as loud nuisance. As a knowledge practice (Somby 1995), *juoiggus* presents a methodology that could be woven into bioculturally sustainable research, as it values *čuoikka jienat* with as much respect, admiration and scientific dignity as any other Earth being – as a “significant” rather than a “radical” otherness (Guttorm et al. 2021; Valkonen 2023: 8).

Through the histories of listening advocated by Mai Britt Utsi, Johan Sara Jr, Ánde Somby and Áilu Valle with mosquitoes, I have learned that there is more than one way to think about mosquitoes (cf. Feld 1982: 45). These *juoigit* and storytellers invited me to listen beyond the acoustic signal and hear the stories and melodies carried in the multifold wingbeat of the mosquito swarm recorded in Govddaluovttafávli – stories that honor and do justice to the marginal and misinterpreted, acknowledging the great ancestral power that this *little one* holds in setting the tundra echosystem in motion, alongside the wind, the herd, and the riding *olbmot*.

quarum illae plus habent admirationis, quae molis minimum²⁸³

²⁸³ Augustine DCD 22.24; Augustine 1984: 1075.

MOHTORGIELKÁ



The frozen surface of the Guovdageaineatnu at Suoidnesuolu resembled an abandoned battlefield. Only the wind was heard, working hard to sweep away the light snow that had fallen this morning upon a scarred terrain, jagged and pocked with holes. How the landscape has changed since yesterday, when the ice fishing contest transformed this bay into a lively meeting ground, anything but “desolate”, as Acerbi would describe it now [1802b: 130]. All that remains of that chattering scene are the boreholes drilled in the ice to let fishing lines pass and, with luck, to draw up a fish or two. Overnight, the temperature had not dropped significantly – and still it lingers around the zero – so most of the holes remained open, as I had hoped. Yet I searched one that was not overly wide, to limit the surface interference on what lay beneath. Once I found the ideal hole, I set my tripod perpendicular to it, gradually unraveling the hydrophone cable above, lowering the capsule vertically into the opening (Figure 41). With headphones on, I monitored closely, and as the microphone was lowered into the water its sensitive piezoelectric qualities could still pick up distant airborne sounds. I could discern the sporadic traffic along the E45 road, yet paying more attention, I even noticed the rhythmic beat of my own heart – a sound that comforted me, as it signified a greater chance of capturing the faint murmurs beneath the water, where sound travels farther with less resistance. As the hydrophone touched the water, the capsule momentarily oversaturated; adjusting to that intense burst, I found my ears submerged in a new dimension of listening.

...

Nothing. Not a movement, not a sound. Since I am recording in 32-bit float, there is no level to adjust, so I suspect it may be due to the output gain on my recorder. I increase it by 10%, yet nothing changes. I raise it to the maximum output level, still, not a whisper reaches my ears, and even the waveform on the recorder’s display offers no hint of activity. Disappointed, I attempt lowering the hydrophone further until I perceive the faint thud of it touching the riverbed. I draw it up a few centimeters, hoping to capture some presences amongst the aquatic plants that blanket the bottom. I wait patiently, but it does not take long before discouragement seeped in. The travelogues of certain Italian travelers who traversed this very same riverbed noting down its stillness surface to my memory. I believe it was Mantegazza who described the silence here as a “mournful shroud of ice”²⁸⁴ [Mantegazza 1881: 104]. And not only Mantegazza – nearly every account I read prior to this fieldwork echoed this notion of the Arctic as an “immensely monotonous and desolate desert”²⁸⁵ [Sommier 1887: 81], a place cloaked in a cold “silence of death”²⁸⁶ [ibid: 30]. These descriptions were part of what prompted me here, in an attempt to prove them wrong and, as Ellen-Johanne [Kvalsvik] wrote, how they experience a silent, untouched nature is connected to their way of knowing [Kvalsvik 2019: 10]. Today, however, I hardly

²⁸⁴ “un funebre lenzuolo di ghiacci”

²⁸⁵ “paesaggio immensamente monotono e triste”

²⁸⁶ “silenzio di morte”

know what I am seeking to hear and record. Perhaps silence indeed calls to those of us who have nearly forgotten it in the city. A feeling known to Maria Loschi, who in the height of Italian urbanization chose to venture to these latitudes and described them as “possessing a singular charm – woven of silence and solitude – that exerts a mysterious charm”²⁸⁷ [Loschi 1935: 136-137]. And yet, no, I know this is not my thought. Or isn’t it? Life exists below the surface here, or at least it did before yesterday’s fishing contest... Johan Sara has spoken to me countless times of the lively voice of the ice and rivers. Are my ears not enough? Is it the microphone? What exactly do they expect to hear? Perhaps some muffled gurgling of water, or the reverberating cracking of ice. And yet, no, nothing at all.

...

Except, perhaps... A faint vibration seems to gradually build in the displayed waveform. Though I still cannot hear it, it is undoubtedly there. The vibration grew and grew until, at last, through the mediation of my headphones, my ears too could detect it. And then I could also recognize it. It was nothing I had anticipated (or wished) to record today: the hum of a machine, likely a snowmobile. But from where? The omnidirectionality of the hydrophone capsule prevented me from pinpointing the direction, so I began to scan the horizon until I finally spotted it – a lone snowmobile, perhaps 150, even 200 meters from my position, farther from the bay and more centered along the river’s course, was the source of such a loud and invasive rumble [track no. 15 in *Muitalusat guldaleami birra*]. To myself, I thought, “Here it is, noise pollution, haunting me even here in these quiet lands”. It was certainly not the sound I had set out to capture, yet I tried to console myself with the thought that this noise, too, had its place in the echosystem I was aiming to represent. I thought again of Kvalsvik’s account, where she describes her sensory impressions – both tactile and auditory – of a snowmobile’s approach over ice and how, audible or not, “tundra is certainly alive and constantly moving” [Kvalsvik 2019: 53].

After ensuring the last tail of reverb had faded entirely, I wound the cable back, stopped the recording and, with a little frustration from the poor “catch”, made my way home to inspect the spectrogram in the hope that more intriguing elements might surface.

Guovdageaidnu

April 8, 2023, 11.30

I ran into Johan Sara at the grocery store. He had come all the way from Máze to stock up for the upcoming Easter celebrations. I took the opportunity to tell him how, just yesterday, I’d attempted to record the frozen river, as he had suggested, using the hydrophone as a rod to fish for underwater sounds. His eyes lit up, and in an excited tone, he asked, “So did you pick up something?” To which I replied, somewhat disconsolately, “Not really, the waveform on my recorder looked like the flatline on a cardiac monitor when someone is dead dead”. Seeing my disappointment, Johan tried to reassure me and said, “I see. It can be very quiet sometimes”. But when I mentioned that I had recorded the distant hum of a

²⁸⁷ “conserva un fascino singolare – fascino tessuto di silenzio e di solitudine – ed esercita un’attrazione quasi direi misteriosa”

snowmobile and its sound reverberating beneath the ice, Johan's eyes lit up once more:

“Then you should be happy. Dat lea hui somá jietna.”²⁸⁸ The fishing was successful”

In the pioneering book *The Tuning of the World*, published in 1977, soundscape theorist Raymond Murray Schafer states:

The destruction of the quiet northern winter by the jamming of snowplows and snowmobiles is one of the greatest transmogrifications of the twentieth-century soundscape, for such instruments are destroying the “idea of North” that has shaped the temperament of all northern peoples and has germinated a substantial mythology for the world. The idea of North, at once austere, spacious and lonely, could easily throw fear into the heart [...] but it could evoke intense awe, for it was pure, temptationless and silent. [...] As silence is chased from the world, powerful myths depart. That is to say, it becomes more difficult to appreciate the Eddas and sagas, and much that is at the center of Russian, Scandinavian and Eskimo literature and art. (Schafer 1977: 21)

Since this seminal work, studies in acoustic ecology focusing on the Arctic region often address the presence of anthropogenic noise pollution by oversnow vehicles, viewing it as disruptive to the conservation of a purportedly remote, natural purity and quietness of those places – a problem in need for acoustic regulations (Schafer 1977: 84-85; Baxter 1990; Farina 2014; Mullet 2014). Ecoacoustic analyses typically rely on quantitative data which customarily do not capture, nor even consult, the complex variety of acoustemologies that local and Indigenous communities cultivate towards the echosystem they share (cf. Gieser 2019). While anthropogenic noise pollution by oversnow vehicles is indeed a growing concern in habitat preservation and especially in “naturalistic” destinations impacted by mass tourism (national parks, wildlife sanctuaries, forest reserves, wilderness areas), it is imperative to recognize the distinctive cultural contingencies where its measurement takes place. And while it is indisputable that the ongoing Sixth Extinction and the resultant biodiversity loss urge for global soundscape conservation efforts, the ethic and the set of methods employed in these acts of sonic salvation are only now starting to be critically addressed within the respective disciplines (ibid; Wright 2022; Kanngieser 2023, 2024). Established ecoacoustic indexes and models often overlook the onto-epistemological diversity underlying the perception and use of certain landscapes (Novak 2015: 126), and this is where a biocultural consultation led by local histories of listening should be invited at the center of policy-making and academic discussions.

²⁸⁸ “That’s a very interesting sound to hear”

This chapter is not about *mohtorgielká* [snowmobile]. Or at least, the sound of this subjectivity is not the sole and primary endpoint of the analysis. Rather, starting from its ubiquitous role in landscape practices up to more-than-musical references – the snowmobile, together with other motorized all-terrain vehicles (ATVs), serves as a lens through which to critically examine a broader *topos* whose ethics and aesthetics notably diverge between Indigenous and settler acoustemologies, while also revealing underlying tensions within the Sámi sensory relationship with their land: this *topos* is that of Arctic silence.

Jaskatvuohta²⁸⁹

Silence is one of the most recurrent and cherished features of the Arctic. While this is true for tourists and nature enthusiasts that visit this region yearning for a retreat from urban loudness to more tranquil surroundings (see below), in Sápmi, silence holds an equally prominent place for Indigenous communities, who experience it as an active component of local ecosystems – a medium through which relationships with the Land and the vitality of all its inhabitants are felt and expressed. In her contribution to *Muitalusat guldaleami birra* (Appendix II.10), Sámi poet Inger-Mari Aikio reflects on a profound sense of belonging and homeliness inherent to silence, a quality often taken for granted yet one that resurfaces with renewed intensity upon returning to Sápmi after time spent away, exposed to loud, urban ecosystems:



<i>Mun in goassige jurddaš ahte dál mun guldalan, muhto mun lihkká dan de dat jienat, dat mearkkašit hirbmat olu.</i>	I never realize that I'm listening, but still I'm moved by the sounds, they mean a lot. They come from somewhere.
<i>Dat bohtet de doppe gosnu. Ja, dat mannet mu sisa.</i>	And they are going inside me. Especially when I'm travelling
<i>Ja, go lean jođus erenoamážit, mun fuobmán ahte, doppe lea menddo olu riedja.</i>	somewhere, then I discover that it's way too loud. And this affects me in the way that...
<i>Ja, dát váikkuha munnje nie ahte mu sisa šaddá dego dakkár čáhpes fápmu.</i>	inside of me, it becomes like this dark power.
<i>Ja mun átestuvvan ja orru ahte mun in sáhte leat doppe šat guhkit.</i>	And I despair and it feels like I can't be there no longer.
<i>Erenoamážit gávpogat leat dakkár báikkít ahte dat lea veadjetmeahtun orrut doppe guhkit áigge.</i>	Especially cities are those places that it's impossible to stay there for a long time.
<i>Dat orru ahte dat garra jienat dego borret mus bihtáid bihtáid mieldde.</i>	It seems like those strong sounds, they are eating me piece by piece.

²⁸⁹ "Quietude, tranquility, silence"

<i>Ja go mun leamašan vahkku gávpogis de orru dego mus lea jávkan juo oassi das mii mun lean.</i>	When I've been for a week in the city, it feels like a part of who I am has disappeared.
<i>Muhto de fas go, ovdamearkadihtii boadan deike ruoktot Sápmi de mun čohkkán das olggubealde dat lea biegga ja sáhtta leat doppe beštor dahje sáhtta leat rievssat.</i>	But then when I, for example, arrive home in Sápmi, then I'm sitting outside here and there's the wind, and there could be beštor or rievssat, birds of all kinds.
<i>Dat lea, dat leat jienat muhto dat lea ráfi jienat.</i>	And those are sounds too. But they are peaceful sounds.
<i>Ja jaskatvuohta, dat báhcet millii dakkár bottut.</i>	And silence, they all leave the mind in such a resting state. ²⁹⁰

The word here – and commonly in Sámi dictionaries – translated in English as “silence” is *jaskatvuohta*. This North Sámi term carries a semantic richness and complexity that extends well beyond the main English definition of a “state or condition when nothing is audible; complete quietness or stillness; an absence of all sound or noise”.²⁹¹ Rather, *jaskatvuohta* encompasses a multilayered concept across both acoustic and psychophysical cognition, referring more accurately to a *peaceful* state or condition when even the faintest sound becomes audible; a quietude that is not marked by stillness but by heightened awareness, where the subtle and nuances of presence emerge.

While the absence of movement may still contribute to the definition of *jaskatvuohta*, in Sápmi stillness never infers a total absence of *jienat*. It is for this reason that, for example, «something as seemingly static, inanimate and silent as a rock can hold a distinctively dialogic role» within Sápmi echosystems (Renzi 2023a: 79; cf. Ochoa-Gautier 2015: 189). In the case of rocks, stones and boulders – which I explored in a recent publication (2023a) – this animacy may be attributed to the hierophonic presence of chthonic entities that inhabit these geological morphologies of the Land (see above). However, a similar acoustic vitality in stillness surfaces also when attuned to the rhythmic unfolding of seasons, where *jaskatvuohta* denotes a relational state for knowing the condition of ice paying attention to its (often quiet) vocal transformations:



<i>Čakčat mun sáhtat čuččodit doppe jávregáttis, ja dat lea áiddo jiekŋumin.</i>	During the fall, I can be standing by the lakeside, and the ice is starting to form.
<i>Jiekŋui jo veahá ja lea jiekŋomin ja ássumin dat jiekŋa.</i>	The ice is forming little by little, freezing and settling.
<i>Dat jienat mat das bohtet, dat gullo</i>	And the sounds that are coming from

²⁹⁰ Aikio 2024.

²⁹¹ Oxford English Dictionary, s.v. “silence (n. & int.)”, September 2024.

<i>dat “krakk krakk”.</i>	that, sounds like “krakk krakk”.
<i>Dahje dakkár bohkas go jiekŋa</i>	Or like this grinding sound of when the
<i>lihkada</i>	ice is moving and developing and...
<i>ja šaddá ja.</i>	It’s this strange tranquillity.
<i>Dat lea imašlaš boddu.</i>	It’s something that you don’t hear
<i>Dat lea juoga maid don it gula juohke</i>	every day. But when you do, then you
<i>beaivve muhto don dieđat ahte go</i>	know that fall is here and, after that,
<i>čakčat maŋit lea skábman de manat</i>	<i>skábma</i> is coming to the lake too – it’s
<i>dohko jávregáddái don gulat ja dat</i>	a very powerful feeling to hear those
<i>lea hui fámolaš dovdu.</i>	sounds.
<i>Dat lea áibbas jaskat, jađe lea fáhkka</i>	It’s completely silent, and then
<i>dat, dat jiekŋa dego eallá.</i>	suddenly, the ice is like it’s alive. ²⁹²

...Even in the glacial immobility of *skábma* [polar night], *jaskatvuohta* is recognized as the “loud” and defining vocality of the winter season, as Johan Sara Jr. resonantly conveys:

Juohke áigodagas lea iežas ivdni ja šuokŋa [...]. Ja go lea 40 buolašgráda de lea duođaid jaskat. Visot dain lea sin iežas mearkkašupmi ekologalaš dássálasvuhtii ja biologalaš mannui. [...] Leat oassin eallimis man ealán.²⁹³

That *jaskatvuohta* is a relational condition towards faint and unheard voices is further communicated in the *muitalus* of Inger-Mari Aikio, in stark contrast to environments that either discourage or entirely prevent this sensory condition:



<i>Muhtimat lohket</i>	Some people say they like to be in the
<i>sii liikojit leat</i>	cities, because cities are so alive and
<i>gávpogis doppe dat lea dat eallin.</i>	there’s so much life there.
<i>Oh mun in ádde dán.</i>	Oh, I don’t understand that.
<i>Muhto dat lea dieđus go mun lean</i>	But it’s because, of course, I’m used to
<i>hárjánan deike Sápmái ja dáppe lea</i>	being here in Sápmi where it’s so
<i>nu jaskat.</i>	silent.
<i>Dáppe don duođaid gulat dakkár</i>	Here you can really hear some really
<i>áibbas jaskes jienaid maddái.</i>	quiet sounds too.
<i>Gávpogis dušše dat garra jienat dat</i>	In the city, only the loud noises come
<i>bohtet ja mannet du čađa.</i>	and go through your body.
<i>Gii doppe gullá maidige dakkár</i>	Who out there would even hear any of
<i>áibbas smávva unna jienaid?</i>	those tiny little sounds? ²⁹⁴

²⁹² Aikio 2024.

²⁹³ “Each season has its own shade of sound [...]. And the silence of -40 degrees is striking. Everything plays a part in the ecological balance and biological rhythm. [...] This is an important part of the world I live in”, from the liner notes of Sara (2010), also published online at: <https://stierdna.com/Releases/Earlier/transmission.htm>

²⁹⁴ Aikio 2024.

Inger-Mari continues her *muitalus* recalling a listening experience that was particularly illuminating of how *jaskatvuohta* presupposes an attentive, almost microscopic listening, rather than a deaf ignorance that equates stillness with an absence of voices (cf. Ochoa Gautier 2015: 183):



<i>Ovdamearkadihti das lea sullii vihttanuppelohkái jagi dassái go dat máđut borregohte dáppe min sogiid lasttaid.</i> <i>Jos gii nu livččii muitalan munnje ahte don sáhtat gullat go dat máđut borret lasttaid de mun in livčče jáhkán.</i> <i>Muhto mun čužžen dan muora vuolde, dan soaji vuolde ja guldalin.</i> <i>Dat orui nu imaš goal dat guldalit duháhat ja duhahát máđut borramin daid lásttaid.</i> <i>Sáhtat gullat dan.</i> <i>Dat lei maid imašlaš boddu.</i> <i>Muhto ii don gávpogis gula diekkár.</i> <i>Vaikko livččii olu máđut de mun in jáhke ahte doppe gii nu váccašii, čužžošii já guldalit go máđut borret lasttaid.</i>	For example, it's been about fifteen years since the larvae started to eat our birch leaves. If someone were to tell me that you are able to hear those sounds of the larvae that are eating the leaves, I wouldn't believe them. But then I was standing underneath this tree, underneath its branch, and I was listening. And it was so amazing to listen to thousands and thousands of larvae eating those leaves. You can actually hear them. That was also strangely relaxing. But you don't hear that in the city. Even if there were lots of larvae, I don't think anyone would walk around, stand and listen to them as they are eating the leaves.²⁹⁵

In her own *muitalus* from the audio-anthology (Appendix II.6), Sámi scholar Ellen-Johanne Kvalsvik also reflects on the sensory numbness that seems to arise from extended exposure to urban echosystems:



When you stop noticing the sounds, you lose a lot of information that are available around you, in the environment. I know that from living in larger cities, after a while you get a bit numb to the soundscape. It's all this noise, like a big river. I get very tired from these sounds. So to me they are noise.²⁹⁶

Now, noise is typically conceived as the polar opposite of silence (Schafer 1977; Sim 2007; Novak 2015; Kraugerud, Coughlan-Allen 2024). According to David Novak, it «is usually understood as a technologically produced field of sound, which is

²⁹⁵ Aikio 2024.

²⁹⁶ Kvalsvik 2024.

superimposed on a natural or social environment» (Novak 2015: 129; cf. Schafer 1977; Bijsterveld 2008). As such, within soundscape ecology and conservation practices, noise is understood as “pollution” that degrades the sonic balance of nature, compelling efforts for its mitigation and abatement (Novak 2015; Farina 2014; Renzi 2025 [forthcoming]). Silence and noise, by their relational nature where silence is marked by sound absence and noise by sound disruption or excess, «can only take on meaning by signifying something else, but [they] must remain incommensurably different from that thing» (ibid: 126). Thus, neither noise nor silence carries inherent meaning on its own; they are normative and relative to the specific acoustemology or auditory cultures that qualify them (cf. Thompson 2017; Malaspina 2018; Gieser 2019; Kraugerud, Coughlan-Allen 2024). Ellen-Johanne, drawing on her experience and sensuous ethnographic scholarship, pronounces on the relativity of aesthetic values correlated to what is noise and what is silence, noting that:

to other people it is comforting to have those [urban] sounds around them, because it is something they are used to. Soundscapes for people are probably very personal. It’s how we learn to use the sensory system and what we sort out as being important and what we sort out not being important. [...] A friend of mine, that has been living in big cities all over the world, he tried to drive by car from Alta to Oulu and there is absolutely – oh, we cannot say “nothing” – but to him there was “nothing” in between, along this road. He got really scared because it was so silent, and it was winter, it was dark, and there were no sounds. So by not having these familiar sounds around him, he got very scared. That was a very anxious place to be in. He described that it is horrible being without sounds of other people – in the comfort of other people.²⁹⁷

This passage resonates with the insights of Ochoa Gautier, who remarks how the «identification of auditory thresholds changes notably from one culture and one living entity to another» (Ochoa Gautier 2015: 189). Here, the relativity of qualifiers like noise and silence intersects with the contextual and biocultural qualification of an ecosystem, underscoring the variability in aesthetic qualities within the sonic connections that individuals and communities cultivate with their surrounding environments (cf. Novak 2015: 127). In these terms, the absence of sounds can be an undesired condition that make the Sámi concept of *jaskatvuohta* inapplicable while, paradoxically, the perception of certain “noises” may contribute to define a certain ecosystem as *jaskat* [silent, quiet, peaceful] (cf. Kraugerud, Coughlan-Allen 2024). *Jaskatvuohta*, as emerges from Ellen-Johanne’s account, is shaped by

²⁹⁷ Kvalsvik 2024.

the quality of relationships formed with certain sounds that acquire comforting and familiar values contextual to each individual or community.

Her own life story – as someone who grew up in a Mearrasámi [Sea Sámi] community – speaks about the cultivation of good relations with the loudness of motorboats that, rather than a disruptive and invasive presence, transmits to her a sense of place, safety and prominence within an echosystem that at once knows profound *jaskatvuohhta*:



I grew up, on an island, a bit out in the sea, where the seascape is dominating with the sounds of the ocean, sounds of different birds – seabirds –, the sound of the people moving, mostly by foot, not so many technical sounds, apart from boats, smaller boats and vessels. Especially these old wooden boats that have a particular sound, because they had this “totaktsmotor” [two-stroke engine], that is an engine going like: dun dun dun dun dun dun dun dung. That is very typical for the older wooden vessels from the coast. When the fishermen went out at 5 o’clock in the morning, I remember waking up to that and then I could sleep one hour before I myself had to go out and feed the animals. [...] I think some people think that noises of boats are annoying, if they are not used to them. It’s probably attached to me being a small girl in the fishing village, and knowing that when I hear this sound – all the boats going out in the morning and also when they come back – people are safe, when they come back. And for me this is the sound of people coming back.²⁹⁸

Through the histories of listening shared by Inger-Mari and Ellen-Johanne, an attempt has been made to illustrate how the Sámi acoustemology of *jaskatvuohhta* diverges significantly from dominant interpretations of silence (cf. Malaspina 2018). While Inger-Mari’s *muitalus* provides insight into how silence in Sápmi is shaped by sentiments of peaceful quietude rather than a strict absence of sound, Ellen-Johanne’s *muitalus* expands this notion to include loud and often contentious technophonic presences, hinting that the evaluation of silence and noise cannot be universally reduced to excess of sound pressure levels or interference, but deserves a qualitative consultation of local aesthetics, ecologies and acoustemologies. This holds especially true in frameworks whose metadiscourse on sound does not differentiate noise as a general category, let alone

²⁹⁸ Kvalsvik 2024.

binaries (Novak 2015: 125).²⁹⁹ The intimacy Ellen-Johanne draws with a “noisy” technological sound like the rumbling of a boat engine effectively echoes and re-aligns us with the loud, motorized subjectivity that inspires this chapter: *mohtorgielká*.

The Sámi modes of land mobility relied entirely on non-motorized transportation, like skis and sledges, until the early 1960s. The introduction of the snowmobile presented reindeer herders with a new tool for covering vast distances and terrains more efficiently, and it quickly became vital to their seasonal livelihood, from the beginning of October to the end of April (Valkeapää 1971 [1983]; Pelto 1973; Helander-Renvall 2016). Beyond simplifying travel, the snowmobile «has also allowed for more permanent housing among reindeer herders, as they can reside farther away from the pastures» (Kuhn 2022: 23). These societal implications have not gone without internal debates and hesitations.

The conflictual imagery around *mohtorgielká* soon after its adoption in Sápmi is creatively demonstrated within the figurative apparatus of the previously mentioned *goavddis* created by Niillas Somby (see ‘Biegga’). Among other symbols meant to prompt self-reflection within Sámi society, the *goavddis* presents an image of a man on a reindeer-drawn sledge mirrored by a snowmobile moving in the opposite direction. According to Ánde Somby’s description of this image:

Niillas was a reindeer herder and he experienced those times when the snowmobile arrived to Sápmi. It was a huge transformation in herding technology here. From the soft technology of reindeers’ sledges and skis, this motorized transportation took over. The figure alludes to the fact that this path may lead to the wrong direction.³⁰⁰

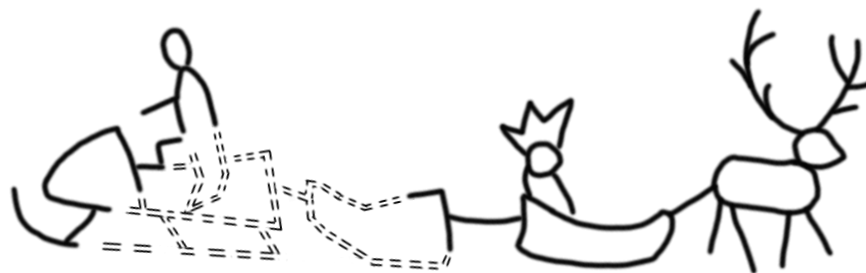


Figure 42 Digital scan of Sámi motorized and non-motorized livelihoods mirrored on Niillas Somby’s *goavddis*.

The mirrored figures on the *goavddis* membrane, as discussed in the first chapter (see above), represent an iconography that allows the contemporary *noaidit* to discern between the different turns and challenges that the future anticipated for

²⁹⁹ Just as in the Sámi languages there is no word contemplating ‘silence’ as complete absence of sounds, there is no single word that frames ‘noise’ as a general qualifier like the meaning it takes in dominant acoustemologies.

³⁰⁰ Ánde Somby, Oral teaching (personal communication), June 11, 2021, Sirbmá, Sápmi.

the Sámi in a rapidly transforming world. This visual symbolism reflects a polydirectional ambiguity in the ways the Sámi experienced this technological change, which moves beyond a smooth, linear transition to modernity (cf. Fraser 2018). A similar polydirectional experience resonates in the lyrics of *Mohtorgielká*, the 18th (spoken word) track on Áilu Valle's album *Viidon Sieiddit* (2019). Set against a soundscape composed by Canadian-Sámi Raquel Rawn and incorporating snowmobile recordings by Jouni Aikio alongside drum samples from Niilo Rasmus, Áilu Valle presents the perspective of a «frustrated Sámi youth who is uncertain of the future of the traditional culture and livelihood» (Valle 2019c):

<i>Vai vel galggašii máhccat ovddežii</i>	Oh we should return to the old days?
[...]	[...]
<i>Leibat dat eallin nu rahpa</i>	I wonder if the life was that good
<i>Ovdalge...</i>	Before either...
<i>Galhan mii diedus birget daid</i>	Well we do of course make shift
<i>veahkkeneavvuid hagage</i>	without the utility
<i>Vai birgetgo...</i>	Or do we...

Áilu's lyrics use the snowmobile as an emblematic subject that reflects ongoing crises facing Indigenous ways-of-being. Similar to Nillas' drum, Áilu identifies a pivotal *turn* around this technological entity, asking: once the Sámi adopted the snowmobile into their way of life, is it still possible for its use to respect the ecosystemic balances that have traditionally been preserved and passed down? Around this probing question, Áilu Valle contemplates:

I think nowadays a lot of Sámi have forgotten the ancestral connections with nature. It's really unfortunate, because the main reason can be found in the assimilation processes that Sámi had historically gone through. But on the other hand, change derives also from the connection with nature itself. Even though you can say that Sámi have a special connection with nature, the main point is that the Sámi have always been skillful in adapting, because nature is so harsh and challenging here in the North. It basically forced people to respect the environment and some of our contemporary choices also come from there. But when the Sámi have incorporated the Western way of living, and when life gets way easier because of technology, they tend to forget their starting point. It makes the process of forgetting easier and you get away from the circle of nature. In the Sámi traditional way, we take only what we really need, but I'm not sure if this is still true or not anymore nowadays. If I think of reindeer herders, now a lot of them have like three different big cars, two tractors, four snowmobile and as many ATVs. And it makes me wonder, is it really necessary? Is there anything left from the traditional knowledge? Because, in that case, you are definitely not taking just what you need, but you are competing against each other to survive.³⁰¹

While the Sámi recognize the continuity of snowmobiles in *árbediehtu* (see below), when technology becomes an expression of economic ostentation, balances begin

³⁰¹ Áilu Valle, oral teaching (personal communication), May 7, 2021, Avvil, Sápmi.

to falter (cf. Valkeapää 1971 [1983]). In the early 1970s, Pelto observed that snowmobile's introduction positively impacted the local economy, it also set in motion a gradual erosion of traditional social structures, fostering social stratification and generating tensions related to economic success among community members (Pelto 1973: 67). This shift also heightened Sámi dependency on fossil fuels and, consequently, on non-renewable energy resources sourced externally. As Kuhn notes, extensive reliance on motorized vehicles has increased the Sámi's vulnerability to economic and political subjugation, with land use dependent on these vehicles often becoming a target for blame-shifting (Kuhn 2020: 35). This concern was also expressed to me by Áilu Valle who remarks how «the adoption a modern livelihood should not become a simple pretext for criticizing the choices of Indigenous peoples». ³⁰² Once more, the frustration in the lyrics of *Mohtorgielká* effectively verbalizes these external pressures:

<i>Maid helveha don duodas oaivvildat</i>	What the hell do you really mean
<i>Dainna ahte boazodoallu goarida</i>	When you say that reindeer herding
<i>eatnama</i>	uses up the land
<i>Seamma láhkai go ruvkedoaimba?</i>	And at the same time defend mining?
<i>Geahča daid proseanttaid</i>	Look at the percentages

In the context of *árbediehtu* and specific landscape practices, according to Gianluca Ligi, the introduction of *mohtorgielká* led to a markedly different perception of time and space, as well as certain landscape qualities, such as snow consistency, ground conditions, animal presence, and herd management (Ligi 2016: 186). Similarly, Lars Johan Jannok (Juvve Biette Lásse) contended that intensive snowmobile use has contributed to younger generations of reindeer herders «eai dovddet eatnamiidda ge, goigo galgá mannat, gokte ealuin johtit ja goigo ealuin beassá» ³⁰³ (in Skaltje 2005: 192). Remaining on landscape knowledge, Cogos et al. argued that toponymy «designating microscale features of the land, such as hills or rocks, are most at risk of disappearing, because the larger scale of travel using snowmobiles and motorcycles has made the use of such landmarks obsolete» (Cogos et al. 2017: 48).

In addition to these societal, economic and ecological concerns, the acoustic dimension of *mohtorgielká* was not without its own set of criticalities. In relation to the just mentioned loss of ecological knowledge, a significant consequence of the acoustic intensity of snowmobiles is the masking of other sound sources, previously essential in the development of environmental awareness and aural skills necessary for a safe navigation of the Arctic. A poignant *dajahus* reported to Maj-Lis Skaltje by Nils Tomas Parfa (Barffá Nils Duommá) vividly captures these sentiments of loss:

³⁰² Áilu Valle, oral teaching (personal communication), May 7, 2021, Avvil, Sápmi.

³⁰³ “lacking a deep understanding of the lands, where they move, how they move with the reindeer herd, and how to navigate with the herd”

Hearggi luod̥i ferte juoiggadit juo muhtin áiggi
Mon muittán iežan ránat hearggi
Muhto ledje áiggit nu rievdan
Ii dan heargebiellu jiena šahtin gula go ealuin vuolggát johtit
Ii gula cussalusaid láidesteaddjin
Ledje skohterat deid jienaid láhppodahtán
Miesi itge gal juo gula go čohkkeme ledjet
Oaidnima juo duogin dat lei goit³⁰⁴

Valkeapää underscored the psychophysical effects of noise from motorized oversnow vehicles, which often exceed 85 decibels, noting a concerning increase in noise-induced hearing loss (NIHC) due to these high sound pressure levels: «To tell the truth, our ears can't stand this mode of travelling, and all reindeer herders have suffered markedly impaired hearing during the course of recent years» (Valkeapää 1971 [1983]: 40). More recently, studies have examined the growing impact of noise pollution on reindeer herding caused by recreational snowmobiling associated with mass tourism, which, since the vehicle's introduction in Arctic Europe, has rapidly expanded as a profitable industry (Olsén et al. 2017; Kvalsvik 2019). Kitti et al. reported how in the Näkkälä and Sirkas pastures – where tourism includes snowmobile safaris – reindeer herders claim that even minimal tourist presence is «enough to disturb reindeer» (Kitti et al. 2006: 152). In a study examining reindeer responses to direct provocation by snowmobiles, Reimers et al. concluded that the sound and visual presence of *mohtorgielká* «appear to have little effect on ungulates in areas where drivers follow predetermined trails», though off-trail encounters can lead to behavioral changes, especially when reindeer are provoked and chased by snowmobiles (Reimers et al. 2003: 748). This very behavioral response to snowmobile sounds, however, was soon found to be an unexpected acoustic advantage in herding practices. Reindeer herders quickly realized that the loud humming of the snowmobile could serve as a strategic tool. Observing that reindeer, «scared to death of a noisy and smelly machine», instinctively reacted to the sound of the vehicle, herders could effectively use it to «chas[e] reindeer in the desired direction» (Valkonen, Ruuska 2018: 98). Tim Ingold notes that this strategy contrasts sharply with traditional methods of herding, according to which

control was established by recognizing and taking advantage of certain innate characteristics of reindeer behaviour, such as the tendency to follow a lead, to bunch up when approached by a dog, and the attraction to the sound of a bell. Under the herder's control, deer moved at a natural pace. Snowmobile herding strategy is based on entirely opposite principles. Rather than following a lead, deer are driven from behind.

³⁰⁴ “Sometimes you have to joik the reindeer / My good reindeer is in my memory / But times have changed / When I move with the herd, I no longer hear the sound of the reindeer's bell / Nor do I hear the calls of the one leading the reindeer / Snowmobiles have extinguished these sounds / And you no longer hear the calf during the reindeer gathering / But it was still there within my field of vision” (in Skaltje 2005: 92)

Frightened by the noise and speed of the machines, they run in panic.
(Ingold 1975: 3-4)

While the loudness and speed of the snowmobile certainly provoke a faster pace and a more turbulent behavior in the Rangifer, it is arguable to claim that this strategy of chasing the reindeer from behind utterly opposes traditional herding principles. As discussed in the previous chapter, within the ecosystemic dynamics that set the reindeer in motion along their migratory routes, the mosquito – together with the wind – is ancestrally reputed one of the major driving forces. More precisely, it has been illustrated how ecological knowledge passed down through *juoiggus* and oral narratives assigns such a propelling role to *čuoikanieida*, the female mosquito, who perturbs and chases the reindeer from behind, driving entire herds to the top of the *duoddarat*. In this sense, though with far greater intensity and anthropogenic control, *mohtorgielká* becomes fully integrated within the ecosystemic dynamics mapped throughout the three chapters of this dissertation – joining *biegga* and *čuoika*, and notably adopting a function akin to the latter; a novel and amplified buzzing that unsettles the reindeer, ultimately chasing them along an intended path. Curiously, this acoustic overlap between insect biophonies and technophonies was, in fact, already noted by Schafer:

one general feature of insect sounds is of interest. More perhaps than any other sound in nature, they give the impression of being steady-state or flat-line sounds. [...] [T]he impression with many insects is of a continuous, unvarying monotony. Like the straight line in space, the flat line in sound rarely occurs in nature, and we will not encounter it again until the Industrial Revolution introduces the modern engine. (Schafer 1977: 36)

Echoing the well-known quote by Sámi linguist, professor, and politician Ole Henrik Magga – “the Sámi are the last to use skis and the first to use snowmobiles” (cf. Valkonen, Valkonen 2018: 40) – the chorus of Áilu Valle’s album title track (2019d), which follows *Mohtorgielká*, recites:

<i>Maŋimuččat geat ledje sabet alde</i>	The last who were on skis
– <i>vuogáiduvvamin, guorraseamen</i>	– adjusting, adapting
<i>Vuosttamučžan skohteriin</i>	The first who started working with
<i>rassagohte</i>	scooters
– <i>siiddat duoddariidda dávisteamen</i>	– <i>siidas</i> reflecting the <i>duoddarat</i>
<i>Áibbašitgo duodas doložii go</i>	Do we really long for the past
– <i>vuogáiduvvamin guorraseamen</i>	– adjusting, adapting
<i>Go áiggít rivdet, de sieiddit</i>	When times change, the sacred rocks
<i>viidot</i>	widen
– <i>gilit odđa dilis</i>	– the villages adapting
<i>dávisteamen</i>	in the new situations

As already suggested by the rapper in a previously mentioned communication, the core of Sámi culture – as also echoed by many community representatives across the four sides of Sápmi – is the ability to adapt and tune to transformations imposed

by harsh environments, as well as other external pressures. In fact, one could say that the defining character of the Sámi is their seemingly relentless capacity to change while remaining true to themselves (Roué 2012: 49; cf. Lehtola others). Thus, despite initial reluctancies due to risks of “deskilling” and other degrading effects, as Valkeapää acknowledges, reindeer herders soon realized that their livelihood today «can’t be done without the aid of a snow-scooter. So we all have snow-scooters» (Valkeapää [greetings]: 41). Snowmobiles and other motorized vehicles required adapting existing skills and developing new ones (cf. Fraser 2018). In this sense, Sámi scholar Elina Helander-Renvall emphasizes the benefits, acknowledging how, if in the past reindeer used to be frightened by the loudness of snowmobiles, over the decades they got accustomed when these vehicles are skillfully maneuvered by herders who attune with the ethology and with the responses of their herd:

it is a good working tool for transportation, driving and chasing the reindeer to a specific spot, and zooming around fast when searching for and gathering animals. It is time-saving which means, for example, that gathering of reindeer for round-ups takes place rapidly and that herders have more time for their families than before. According to the ANT approach, reindeer are also actors and influence the situation in a network. Reindeer are easily scared by the roar of the snowmobiles. [footnote: It has to be remarked that reindeer have become used to the noise of the snowmobiles, apparently because they (reindeer) associate the sound of the motor with extra food that herders bring in winter to them]. But reindeer tend to behave collectively in herds and follow leading individuals (reindeer) when chased or moving to a specific direction or place. These behavioral attributes make it easy to drive them towards a certain locality. (Helander-Renvall 2008: 30)

Thus, although this transition occurred not without nostalgia and regret for ancestral non-motorized methods, the snowmobile has ultimately integrated into the echosystem of reindeer herding. (Figure 43–44). According to Roué, particularly for younger generations who have grown up with snowmobiles,

their smell and their noise are included in his personal landscape. [...] And when they migrate, it is as always a close communion between people and reindeer moving across a landscape of known places rich with meaning, that today includes the snowmobile and its new noise. (Roué 2012: 48–49)

It would be a limiting assumption, however, to consider these elements relevant solely for the sensory heritage of reindeer herders. In her story shared in the audio-anthology *Muitalusat guldaleami birra* (Appendix II.8), similar affective values and familiarities significantly shape a broader collective memory that spans generation across both space and time, as emerges in the voice of young journalist Ida Emilie Lindseth Marakatt. From a reindeer herding family in the Swedish side but grown up in a large city in southern Norway, Ida describes how the auditory and olfactory familiarity with snowmobiles and ATVs acts as a powerful sense of

(returning to) place. For Sámi who have lived away from their homeland or for various reasons distanced from traditional livelihoods, these sounds and scents become indeed qualifiers of a reconnection with the Land and Indigeneity.



*Bajášadden máddin, stuorra gávpogis.
[...] Ja de go mun ledjen unni, mii
láveime juohke jahki, juohke geasset,
mannat davás.*

*Mun muittán ahte dat mii lei buot
suohtáseamos, lei go áddjá váldii min
mielde skooterin vuodjit dahje ATV.*

*Ja mun muittán ahte ovtatmano go
son dego álggehii dán motora, ahte de
mun dihten ovtatmano ahte “okei, dál
mii leat jođus. Dál mii áiggut vuodjit”.*

*[...] Ja go mun gulán dán áiggis dien,
aistton go motora álggá, dat addá hui
ollu muituid munnje ja hui olu
vásahusaide maid bohtet ruovttoluotta;
eronamaš dál go mu áddjá lea jápman.*

*Muhto mun dieđan maiddái ahte dat ii
leat várra nu buorre lunddui, jus
jurddašan lunddui ektui ja eronamaš
jus don it geavat dat barggus dego
boazusápmelaččaide han lea dego
raidu dege juoga maid sii dárbbasat
sin doalus dahje gos sii barget.*

*Ja mun jurdaašan dan birra maid ahte
dat ii lea nu buorre ahte mun dušše
somá dihte vuoján.*

*Muhto de lea seammá áiggis addá hui
ollu muituid ruovttoluotta ja dat lea
juoga maid mun lean álo lihkkon maid
mun ja mu “viellja”, moai letne álo
liikon motora ja maiddái skooterat
maiddái dálvet. Ja maiddái dan hádja
masa dan addá. Dat ii lea dušše jietna,
muhto maiddái dien bensinhádja maid
mu mielas... Dat addá munnje diekkar*

*fiinat muituid oaivái muhto mun
dieđan muhtumiida geat várra livččet
dadjan dat ii leat nu buorre.*

*...dat lea goitge ovttá jietna mii
mearkkaša oba olu munnje, da leat dan
ATV-jietna. Dovddan diekkar
fridjavuohta go vuoján.*

I grew up in the south, in a big city.

[...] And when I was young, every
summer of every year, we used
to go to the North.

I remember that the most fun time was
when áddjá [grandfather] used to take us
with him driving the scooter or the ATV.

And I remember that the moment
he started to engine, I instantly knew
“okey, now we are on our way.

Now we are going to drive”.

[...] And when I now hear the sound
that the engine makes as it starts,
it brings back so many memories to me
and many experiences come mind;
especially after áddjá passed.

But I also know it isn't so good for the
nature, if you think in terms of the
nature,

and especially when you don't use it for
work like the reindeer herders do, like a
gear or something they are dependent on
in their herding or where they work.

And I also think about that
it is not maybe so good that I just drive
for fun.

But at the same times it brings back lot of
memories, and it is something I and
like my brother have always
liked engine and the scooter during the
winter.

Oh, and the smell they give.

It is not just the sound, but the smell of
the fuel too, in my opinion...

That brings back beautiful memories
to my mind, although I know
some would say that it is not
healthy or good.

...that it is at least one sound that means
a lot to me, it is the sound of ATV.

I feel a feeling of freedom

when I drive.³⁰⁵

³⁰⁵ Lindseth Marakatt 2024.

And even for Sámi living in the north, snowmobiles and ATVs are not exclusive to reindeer herding work but engage with and support a variety of livelihoods that include fishing, ptarmigan trapping and hunting, berry picking, or simply covering distances to visit family or a *verdde* (Kitti et al. 2006: 147). This integrative role of snowmobiles and ATVs in Sámi ecosystems is nowadays recognized and safeguarded by national and international regulations. Regarding Sámi rights for traditional land use in the Finnish legislation, for example, these vehicles are mentioned as essential for the ecological and economical self-determination of Sámi identity and culture:

Sámiid kultuvra ipmirduvvo vuodđolága njuolggádusas viiddis doaban. Njuolggádus ii rádjášuva dušše gielalaš vuoigatvuodaid dorvvasmahttimii ja ovddideapmái, baicce dat ollá vel viidasit dorvvasmahttit sámiid kulturháme, masa gullet maid sámiid árbevirolaš ealáhusat, dego boazodoallu, guolásteapmi ja bivdu. Maid árbevirolaš duodji lea oassi sámi kultuvrra. Lassin sámekultuvrii gullet maid árbevirolaš ealáhusaid dálá heivehanhámit. Dat, ahte sápmelaččat geavahit dán áigge mohtorgielkkáid dahje njealljejuvllagiid kultuvrii gullelaš ealáhusas, ii váldde eret dan, ahte sii leat eamiálbmot. Dán lea cealkkán maid ON olmmošvuoigatvuohtakomitea. Árbevirolaš ealáhusat leat sápmelaččaide guovddášis kultuvrras ja identitehtas nu ovttaskas go maid oktasas dásis, muhto dat mearkaša sidjiide maid ruđalaš birgenlági.³⁰⁶ (Olsén et al. 2017: 123)

The value of technological adaptation in Sámi society is metaphorically summarized by *juoigi* and jurist Ánde Somby, who reflects on its constructive prominence with regard to the vitality Indigenous heritages:

In tradition there must be innovation. Innovation and tradition are the earmarks of a healthy society. If a society only has innovation and no tradition, then that society is like a goldfish that never remembers the moment before, and if a society only has tradition, then it's like a rock that just exist there, and nothing happens.³⁰⁷

The sonic relationships woven between people, reindeer and snowmobiles thus define the most contemporary horizons of a far-reaching biocultural heritage that, through adaptation and transformation, maintains vitality and an enduring fidelity to itself (cf. Harrison 2015). Inscribed within a shared set of ways of knowing, *mohtorgielká* elevates to subjectivity – a technological and ethical ‘first-person’

³⁰⁶ “Sámi culture is understood as a broad term in the Constitution. The Regulation is not limited to the protection and development of linguistic rights, but it aims to further protect the Sámi cultural heritage, which also includes Sámi traditional livelihoods, such as reindeer husbandry, fishing and hunting. Traditional *duodji* is also part of Sámi culture. In addition to Sámi culture, the current forms of adaptation of traditional livelihood also belong to Sámi culture. The fact that the Sámi use snowmobiles or ATVs in cultural activities today does not take away from the fact that they are an Indigenous people. This has also been stated by the UN Human Rights Committee. Traditional livelihoods are central to Sámi culture and identity both individually and collectively, but they also mean financial survival for them.”

³⁰⁷ Ánde Somby, Oral teaching (personal communication), May 19, 2021, Sirbmá, Sápmi.

whose ontology and agency stems from lively reciprocities within the entangled spatialities and temporalities of the echosystem:

A reindeer herder knows together with the collective of herders, with a reindeer, together with a fell and with a snowmobile, just like a *duojár* (crafter) knows together with the materials and techniques, together with ancestors and future generations. Knowledge emerges and is tested in active relationships, and a central purpose of this kind of knowledge is to ensure that life and living will be possible also in the future; it is not knowing merely for the sake of knowledge itself, but rather for the sake of responsible relationships. (Valkonen 2023: 9)

The epistemological complicity of knowing and listening-with snowmobiles – as suggested from this last passage – opens the door to the discussion on the more-than-musical possibilities of *mohtorgielká*.

As discussed in the Introduction (see ‘Juoiggus’), any element – whether conventionally ‘organic’ or ‘inorganic’ – can inspire *juoiggus* or serve as the *juoiggalmas* of a *luohti*. Through the exemplary case of the golden jackal, I have also illustrated how *juoiggus* acts as an epistemological paradigm that “names” changes occurring in the echosystem, encoding them within a recognizable dynamic system of values, thereby expanding the same echosystemic network with new sonic connections, or *luodit*. Through this more-than-musical quality of *juoiggus*, the Sámi engage with change by capturing its essence [*luondu*] and (ad)vocating it in the performance, and they can catch and (ad)vocate this *luondu* to the extent that they reciprocally attune and listen-with it.

The growing repertoire of *luodit* where machinery, transportation and other technologies are the *juoiggalmas* signals a parallel, ongoing expansion of subjectivities in Sápmi. Through these unprecedented *luodit*, many *juoigit* embrace – or in rare conflictual cases, exorcize – the “new” and make sense of its impact on a homely echosystem. Loudly projecting its technological voice across the tundra, *mohtorgielká* has thus asserted itself as a soundmark defining the long Arctic winter. To the ear of different *juoigit*, this loudness appears a primary qualifier of the *luondu* of snowmobiles. In fact, one of the few *luodit* I encountered related to this technophonic subjectivity plays specifically with voice amplitude in its sonic mimesis. In staged performance like the one I recorded at the 2019 “Ijahis Idja” festival in Anár, this expressivity is further emphasized through the mediation of another technological element, the microphone. In the recording (Audio 9), Wimme Saari joiks *mohtorgielká* accentuating the loud and crispy roar of the engine by saturating the capsule of the microphone held on stage. Morphologically, the sonic mimesis also unfolds through gradual pitch shifts and punctuated breaks, vividly mirroring the gear changes and jolts from an uneven terrain (Figure 45).

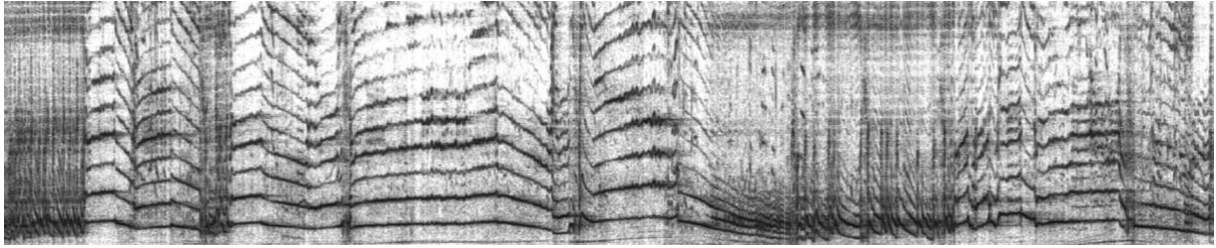


Figure 45 Technophonic sonic mimesis visualized through a portion of the spectrogram from the *mohtorgielká luohiti* joiked by Wimme Saari at the 2019's edition of the Ijahis Idja festival, Anár.

Similar to the case of the mosquito, the sound of the snowmobile is conventionally sorted by dominant epistemological frameworks as a noise, an undesired sound «defined by its mutual exclusion from the category of music» (Novak 2015: 126). In light of this exclusion, listening-with the bio(techno)cultural counter-narrative at the foundation of Sámi more-than-music might offer alternative teachings for a broader, more meaningful and serious inclusion of diverse voices – including technological – in the global debate on musicality. As Dylan Robinson provocatively suggests, if we attend «to affect alongside normative listening habits and biases», this more intimate listening positionality «allows us to imagine (or audiate) otherwise» (Robinson 2020: 38). Although, during my fieldwork, I have not personally heard anyone explicitly refer to *mohtorgielká* as a *juoigi*, both Mai Britt Utsi and Johan Sara Jr., in mimicking the sound of the vehicle, employed vocal techniques reminiscent of *juoiggus* – much like when Mai Britt imitated the voice of the mosquito before seamlessly transitioning into its *luohiti* (see above).

On the role of the snowmobile as *juoiggaha* – a catalyst for *luodit* – *juoigi* and reindeer herder Olof Blind (Bolnnu Ovlá) describes to Maj-Lis Skaltje how,

Dál ná skohteráigge mon láven álo juoigat go mon bohccuid vuoján. Nu guhká go dat manná buorit, dat manná nu fiidnát. ležat jelgii goit orru nu finna luohiti boahtime. Dasa gávdná nu olu sániid, maid ii dábálaččat jurddet ollenge. (in Skaltje 2005: 216)³⁰⁸

Comparably, a reindeer herder from the Guovdageaidnu municipality told me that when she follows the reindeer on the *duoddarat* with her snowmobile, the engine of the vehicle occasionally provides a droning sound which triggers the spontaneous performance of *juoiggus* (Renzi 2023b: 168).³⁰⁹ Although predominantly referring to the sound of motorboats, Mai Britt Utsi also convened that if one listens-with motorized sounds, these may supply our voice with an almost boundless source of *luodit*:

³⁰⁸ “Now, during snowmobile times, I always joik when I’m driving after the reindeer. As long as things go smoothly, the *luohiti* also sounds beautiful. In my opinion, a nice *luohiti* comes. You find many words for the *luohiti* that you usually don’t even think about.”

³⁰⁹ This was also mentioned to me by Sámi *juoigit* and musicians Hilda Länsman and Lávre Johan Eira, Oral teachings (personal communications), February 4, 2023, Guovdageaidnu. A similar account is reported in Driver (2012: 11)

<i>Je de iešgudetlagan sáhttan máksin</i>	You pay attention to different things, a
<i>heargi, biila, fanas.</i>	draft reindeer, a car, a boat.
<i>Na juohkelágan mainna johtta</i>	All kind of things with which people
<i>olmmoš, dat lea hui na juigalaš dat</i>	move, they are very “joikable”, like
<i>ahte go don vuojat go gulat motovra</i>	when you drive and hear the sound of
<i>jiena.</i>	the engine. ³¹⁰

On similar lines, Aubinet offers stimulating considerations on the role of transportation as catalysts of *juoiggus*:

As far as I can tell, the only human-made things that people commonly joik are cars and snowmobiles, although these are rare sources in comparison to animals, places, and people. It may be that a guiding principle for what can be joiked is movement: people, animals, vehicles, and landscapes are engaged by moving through the land, whereas institutions or cell phones may be considered more static. (Aubinet 2020a: 20)

Although Mai-Britt Utsi’s sensitivity to the sound of motorized vehicles seems to lend support to this theory, I find it crucial to recognize that while movement can indeed catalyze *juoiggus*, the stillness of the *juoiggalmas* does not inherently reduce its capacity to *juoiggaha* – as mountains and rocks, despite their stillness and apparent silence, continue to sustain *luohti* and inspire Sámi to joik (Renzi 2023a).³¹¹ Just as stillness in Sápmi does not equate with absence of sounds or voices (see above), it should not be seen as limiting the power of any entity to joik, to be joiked or to sustain *juoiggus*. I argue that the greater incidence of snowmobiles on *juoiggus*, over that of other modern technologies, rather reflects the positive relationship – almost a ‘kinship’ – cultivated with this subjectivity and its respected integration into the traditional echosystems where *juoiggus* thrives. The absence of wind turbine *luodit*, for instance, may not necessarily be due to their stationary nature, as opposed to the inherent mobility of snowmobiles. Rather, it accounts for the constructive role that snowmobiles play in the reindeer herding echosystem, supporting and driving the reindeer along ancestral trails, in contrast with the negative impact of the sound of wind turbines that, circumvented by the herd, disorients the reindeer and poses a threat not only to their survival but, by extension, to the echosystem as a whole.

In these terms, I argue that beyond taking on more-than-musical qualities, the loud sound of the snowmobile – much like those of motorboats previously invoked in Ellen-Johanne Kvalsvik’s *mutitalus* – becomes, for some people in Sápmi, a familiar presence and a vital constituent of *jaskatvuohta*: a quietude relationally defined by an affective listening that transcends sound amplitude and rather cultivates attunement to the intense expressiveness of even the faintest whispers and finds quiet comfort in even the loudest “noises”. Finally bringing *mohtorgielká*

³¹⁰ Mai Britt Utsi, Oral teachings (personal communications), August 15, 2023, Guovdageaidnu.

³¹¹ Ánde Somby, Oral teaching (personal communication), June 11, 2021, Sierbmá, Sápmi.

into the conversation, the *muitalus* shared by Mathis Eira in the audio-anthology naturally encapsulates this defining quality of listening-with affection:



*Olmmoš de gárvodit ja geahččá dušše
ohccat jienaid maid addet buoriid.*

*Olmmoš háliidá gávdnot dego
oadjebasvuohta juohke dinga mas
gullá dego. Dego
oahpesolbmotjienaid, dat addet
oadjebasvuohta. Ja iežan olbmoš
jietnat, bearašša. Ja dieđusge mu
oktavuođas gal leat daid guokte
jietna; eatni dahje luohiti dahje eatni
go juoigá ja maiddái bohccut-jieanat,
go lean bajašadden bohccuidguin ja
mun dovddan ahte mun oaččun
diekkár dovddu dego ahte mun lean
ruovttus. Da leat goit dan maid mun
dovddan. Mun jáhkan da leat aistton,
jus mun dajan dál ahte mun ii beasse
goassege gullat bohccuidjietnat, mun
jáhkan ahte de gahče olu
oadjebasvuohtá ja dat dovddu ahte
don leat ruovttus, da gahče hui olu
eret.*

*Dat lea aistton dan maid olmmoš
dovdda, da leat aistton dan maid
olmmoš háliida guldalit.*

*Olmmoš oačču aistton dán dovddu
ahte lea oadjebasvuohta, da leat
ruoktu ja da leat aistton dan man
ohcalat dego dan bađe go eará jietnat
mat dego, dat eai leat nu vuohkasi
gullat dege addá dege hui unohas det
olmmoš garvanit deidda dieđusge nu
ahte.*

*Nu ahte mun jahkan ahte da leat
aistton vuos makkar jienaide, makkár
oktavuohta don čanat dan jiena maid
mun jurdašan nu ahte, da lea muhtun
jienaid mat muhtimiidda leat hui
dehalaš ja muhtimiidda leat eará
jienaid mat leat hui dehalaččat.*

*Ovdamearkka dihte muhtin liiko
scooterjienaid ainna daid liikojit
scooteriin, ja ainna daid čatnet dasa
buori oktavuohta. Nu ahte da leat*

People look for the sounds that
transmit good feelings. People want to
find, like, safety in everything they
hear.

Like the sounds of familiar people,
they bring safety...

The sounds of your own people, your
family. And in my case I feel certainly
connected with two sounds: these are
the sound

of my mother when she joiks and the
sounds of reindeer. Because

I grew up with reindeers and when I
hear them I get the feeling of being
home. At least, this is what I feel. I
believe that if I now say that I will
never hear

reindeer-sounds again,
much of that feeling of safeness
would fade away.

I wouldn't feel home
anymore.

It is what people feels connected to...
That is what people
want to listen.

You get the feeling you are safe, that
you are home. That this is what
you are looking for.

While for other sounds, like
those that are not so good to hear,
that are very unpleasant,
people certainly
avoid them.

I believe it depends on what kind
of sounds, what kind of relationship
you create with the sound.

There are some sounds that
matter more to some people and other
sounds that are more important to
others.

For example, some people enjoy the
sound of snowmobiles
because they weave good relations
with the scooter. So those are feelings

<i>dieđusge duovdduid maid leat hui olu čatnun dieidda jienaide.</i>	that are very much connected with the sounds. ³¹²

In his contribution, while discussing the affective values inherent to the reindeer herding echosystem, Mathis Eira underscores the sense of safety [*oadjebasvuohtá*] and positive connection [*oktavuohta*] that the sounds of snowmobile may signify to some. Since their introduction in the 1960s, snowmobiles have played an indispensable role in Sámi traditional land management practices. They proved remarkably valuable in reindeer husbandry, as this crucial profession required – and in some cases still requires – entire families to be constantly on the move throughout the polar year. The stories shared within the audio-anthology, along with numerous fieldwork accounts, reveal that the sounds of snowmobiles and ATVs are not merely tolerated, yet often perceived as aesthetically pleasant or even “therapeutic”, evoking a sense of homeliness and contributing to a local sense of place. Mathis Eira’s *muitalus*, therefore, speaks to issues of acoustic tolerance and significance, as well as biocultural sustainability. In doing so, it shows affinities with the message in Áilu Valle’s *Mohtorgielká*, which advocates for the Sámi right to decide on their own matters, in reconciling ancestral knowledge with this technological subjectivities for the pursuit of upholding traditional livelihoods.³¹³ Incidentally, it also advances a response to Schafer’s quote from the chapter’s opening, cautioning about how sounds that certain people consider to be noise, might be pleasant or even vital for others.

There is something both grotesque and feticistic in Schafer’s *acoustemocentric* preoccupation with Arctic “soundscapes”. Is the snowmobile, integrated into the traditional landscape practices and echosystemic balance of Sápmi, truly “chasing silence” from this world? Whose “silence” and whose “idea of North” is shattered or offended by these intentional adaptations on Indigenous lands? The ‘risk of deafness’ posed by the loudness of these motorized vehicles is antithetically mirrored by the ‘risk of deafness’ towards multiple, co-existing *ideas* of the North, which resist being singularly defined and universalized.

<i>Diktibehtet min leat ráfis</i>	Let us be in peace
<i>Eat mii leat dis doalvumin maidege</i>	We are not taking anything from you
<i>[...]</i>	<i>[...]</i>
<i>Dál sii vigget mearridit min áššiin..</i>	Now they are governing our issues...
<i>Min áššiin mearrida luondu</i>	Nature governs our issues
<i>Min áššiin mearrida boazu</i>	Reindeer governs our issues
<i>Min áššiin galgat beassat mii ieža</i>	Our issues must be governed by
<i>mearridit</i>	ourselves
<i>Danin go mii leat maid luondu.</i>	Because we are Nature too. ³¹⁴

³¹² Eira (Mathis) 2024.

³¹³ Áilu Valle, oral teaching (personal communication), May 7, 2021, Avvil, Sápmi.

³¹⁴ Valle 2019c.

Silence

I have found silence in Sápmi

Airvaaravägen, Vazáš

June 7, 2023, 18.30

Today, I have found silence in Sápmi. After months of learning that this condition does not truly belong to these lands – despite the enduring settler imagery that paint it as a synonym of vast emptiness and terra *nullius* – there it was, unmistakably before me: silence and desert. Moments earlier, I had been hiking through the dense, chirping forest along the Airvaaravägen after parking my car on the side of the E45. Majestic Scots pines (*Beahci*; *Pinus sylvestris*) creaked and swayed in the wind, raindrops trickling from their branches after a recent downpour. The trees densely surrounded me, and then, within a couple of steps, they were not there anymore. It was as though I had crossed an invisible boundary; the forest ended – just stopped – giving way to an abrupt, open expanse of churned-up earth. Piles of branches and stumps of felled trees lay scattered across the clearing. I found myself standing on the edge of a clear-cut, and there I began to see why it bears such a name. Not only it had created a sudden barren landscape where, over several hectares, all the trees had been felled – to the extent that, despite standing in what had once been a forest, I could easily see the horizon – but, more strikingly, to my ears gone were the layers of sound that surrounded me just moments ago. In that sensuous deafness, I set down my microphones and started an auxiliary recording. My faithful matched pair of omnidirectional mics, sheltered in a furry zeppelin, now stood on a tall tripod, imitating the only other landmarks in this desolate landscape: skeletal trunks that remained, dead or dying, a reminder of what had happened to their arboreal kin (Figure 46). These were snags, the corpses of trees left standing as part of an ecological practice by foresters, apparently meant to mitigate some of the impacts of logging. A lone grey-headed woodpecker (*Ránesčáihni*; *Picus canus*) moving between these snags used them as lookout points, surveying the surroundings. The woodpecker let out a call that finally reattuned my ears to the surroundings, for they had felt heavy and hollow, only absorbing the absence and loss. It seemed as though the woodpecker rekindled my hearing, because from that moment, I began to detect other voices that had, until then, lain submerged by a heavy stillness. A brambling (*Vintán*; *Fringilla montifringilla*) punctuated the silence with a dry, rough trill at intervals of 10 to 15 seconds, calling from the edge of the forest across the cutting. Most notably, though, I felt disoriented by

sounds that were particularly difficult to pinpoint in that desertified ground. Without the wooden walls of trees, sounds from far distances traveled easily into this barren quadrant, and the abrupt forest border enriched them with echoes that bounced from one side to the other. Standing out sharply was the clear, ringing, repetitive “tew-tew-tew” of a common greenshank (*Stuorračoavžžu*; *Tringa nebularia*) calling from a bog on the far side of the trees. A pair of late whooper swans (*Njukča*; *Cygnus cygnus*) added a brief duet, though I could not discern where it originated; they were distant, and only a faint echo reached me. Beyond these occasional bird calls, I was surprised by the total absence of mosquitoes, even near the bog. Though it is only early June, in Guovdageaidnu, I would have already needed my mosquito net for any excursion in the forest. Although I cannot claim that the place was completely silent, every sound felt strangely disconnected. They felt fragmented, mirroring the fragmentation of the landscape. And between these sounds, I could indeed find it: silence. Perhaps one of the most intense impressions I have encountered so far in my time in Sápmi. When the bird calls were quiet all at once, I could almost perceive solely the sounds generated by my body – an experience that led John Cage to realize that absolute silence is impossible – in life. Yet, today I have found silence in Sápmi. It was in those places where the extraction of natural resources has stripped away all but a cemetery of dead trees who could left nothing to hear, but an empty acoustic space for the mourning of some birds [track no. 21 in *Muitalusat guldaleami birra*).

150 years ago, Stephen Sommer described the sonic quality of this same, albeit healthy, boreal forest as a “dead silence”³¹⁵ (Sommer 1887: 30), reducing the natural quietude of these places to a lifeless stillness. This perspective, *de facto*, reflects a dominant narrative that has for centuries associated the Arctic with a pristine emptiness, where the silence of the land is equated with the silence of its inhabitants (Grim 2001 44-45; Ligi 2016: 99-100; Ulturgasheva, Bodenhorn 2022: 27). As Ellen-Johanne Kvalsvik fittingly notes, «[h]ow you experience a silent, untouched nature is connected to ways of knowing» that starkly separate nature from culture and may lead to forms of epistemic ignorance (Kvalsvik 2019: 10; cf. Finbog 2022b; Kanngieser 2023). Completely oblivious of the Sámi – who nonetheless accompanied (and served) him throughout his Arctic expedition – in his travelogue, Giuseppe Acerbi delegitimizes the history and heritage of Indigenous communities on their land, questioning the existential significance of such an emptied geographic expanse:

That profound solitude and silence which every where reigns, will every instant suggest the question, to what good end do those places serve? To what purpose all that beautiful scenery of lakes, rivers, rivulets, and

³¹⁵ “silenzio di morte”

cascades, if those deserts are never, as would seem to be the case, to be populated by human beings? (Acerbi 1802b: 130)

The written accounts of settlers and explorers reaching the northernmost areas of continental Europe clearly reinforced an idea of *terra nullius*, seemingly justifying settler claims to these territories (cf. Finbog 2022b: 6), where the mystified emptiness was, and still is, paradoxically associated with «utterly imaginable riches» (Ulturgasheva, Bodenhorn 2022: 27). These exotifying and commodifying descriptions often relied on sublime impressions of a “vast emptiness” and “infinite silence” that, emphasizing vacuity, set the stage for extensive exploration, conquest and exploitation of the Arctic (Grim 2001; Finbog 2022b; Ulturgasheva, Bodenhorn 2022; Kanngieser 2023). Consequently, these accounts underlie a dominant and pervasive history of listening to the Arctic that, in the complete absence of sounds and life, fossilized the idea of a silent North, still recently advocated by Schafer within dominant scientific frameworks (see above). This “idea of the North” – that in Schafer delegitimizes every declination of snowmobile uses – is at the core of an acoustemological conquest of the region, which deliberately ignores or silences «the knowledge and cultures of Indigenous populations, of their memories and ancestral links and their manner of relating to others and to the land» (Finbog 2022b: 5). Such narrative tropes as the silent North have thus contributed to a deep epistemic divide that even molded contemporary ecoacoustic scholarship, where reductive interpretations of boreal ecosystems still linger. Schafer’s mystifying perception exemplifies this, while for ecoacoustic researcher and practitioner David Monacchi,

[...] anche dopo varie escursioni verso il lontano Nord e a Vancouver Island, rimasi deluso, c'erano pochissimi suoni. [...] Il “bottino”, dal punto di vista sonoro, fu scarso, ma a quella fredda, sterminata e silenziosa foresta devo moltissimo: fu lei che mi fece definitivamente capire che in futuro avrei dovuto concentrarmi soltanto sui Tropici³¹⁶ (Monacchi 2019: 47).

Through the epistemic criticalities presented by the sound of the snowmobile and the counter-narrative on silence offered by the Sámi concept of *jaskatvuohhta*, I have sought to highlight how Sámi histories of listening emphasize the vitality of never-voiceless ecosystems. From these narratives, an Indigenous acoustemology emerge where silence is solely an illusion that does not exist even where life ends – as even in its lifeless stillness, a cleared forest of skeletal trees can continue to pass down stories as long as someone is ready to listen with them:

³¹⁶ “[...] even after several excursions to the far North and Vancouver Island, I was disappointed – there were very few sounds. [...] The ‘loot’, from a sonic standpoint, was meager. However, I owe much to that cold, vast, and silent forest: it taught me that in the future I would need to focus solely on the Tropics”

ja go visot lea meaddel

ii gullo šat mihkkege

ii mihkkege

ja dat gullo³¹⁷

(Valkeapää 1988, §571)

³¹⁷ “and when everything is over / nothing is heard any more / nothing / and it is heard.”

(In)conclusions

Drawing on the idiom '*eanet go musihkka*', coined by Maj-Lis Skaltje as a cautious encapsulation of the all-encompassing (in)definition for *juoiggus*, this dissertation explored the theoretical and applied horizons of "more-than-music" by listening-with Sámi echosystems, acoustemologies and histories of listening. While ethnographic literature has historically stripped *juoiggus* of other-than-human agency – categorizing it as an exclusively cultural (inherently human) heritage – Sámi onto-epistemologies demonstrate that this tradition transcends human exceptionalism, rather characterizing *juoiggus* as a biocultural heritage shared among the Sámi and other Earth beings inhabiting the northernmost regions of continental Europe. This recognition, in the dissertation, urged the adoption of a biocultural approach to trace relational ontologies where other-than-human beings and the Land cannot be separated from the socio-cultural sphere. These relational ontologies notably find privileged manifestation in the practice of *juoiggus*, where *luohti* represents a sonic relationship between human and other-than human subjectivities, communities and place. Although *luohti* sounds like music, it conveys much more; thus, it cannot be uncritically reduced to this singular top-down category, historically situated within dominant acoustemologies. More-than-music emerges as an Indigenous counter-theory and describes a bottom-up concept that, from Sápmi, challenges a scholarly exhaustion determined by early and contemporary ethnographic accounts that have essentialized *juoiggus* as solely a musical phenomenon.

The Introduction – which sets a theoretical foundation for this dissertation – preemptively answers the leading question, 'how can *juoiggus* be explained as something more-than-music?'. Here, *juoiggus* is portrayed as a holistic phenomenon, a complex network of sonic reciprocities that develop over time within a certain area, involving all the entities that characterize it, and the ways they influence each other [ecosystem]. Thus, establishing and reinforcing an inter-subjective kinship that extends beyond the human, *juoiggus* can be explained as something more than just music. In this same section, *juoiggus* also theoretically surfaces as an acoustemological paradigm; a way-of-knowing the world through listening and sounding practices that encompass the Land and all its subjectivity [acoustemology]. Because environmental sounds – as other-than-human voices or, rather, *luodit* beyond human voices – carry valuable knowledge and messages for those attuned to them and able to interpret them, *juoiggus* is explained in Sápmi as

something that might take on musical form; yet, cannot be simplified to melody alone and preserved as such. Finally, staying on an exquisitely theoretical dimension, *juoiggus* is described as engaging with non-linear time-spaces by tracing and encoding ecosystemic genealogies within specific formulas that ensured the preservation of not only the memory of individuals, communities and places, but also of practices and long-standing connections people have had with the land [history of listening]. These traces, acoustically woven into the landscape, represents a biocultural heritage that older and younger generations of Sámi continue to reassemble and pass on in the creative and ever-adapting performance. However, according to Sámi orality, such transmission is fostered also among other Earth beings – wind, rivers, mosquitoes and, why not, snowmobiles too – where the words ‘tradition’ and ‘heritage’ are inseparably entwined with other forms of life and extends to entire ecosystems. Challenging human exceptionalism intrinsic to the dominant concept of ‘music’ positions *juoiggus* as something more than music, where human and other-than-human *juoigut*, together with the Land, embody living archives for the safeguard and transmission of ancestral knowledge, while also providing key insights into how this knowledge and the natural landscape of Sápmi have transformed over time. The Land vitally participates into the safeguard and transmission of ancestral knowledge, and this urges the acknowledgement of its subjective will through the promotion of bottom-up heritagization and conservation practices.

To extend the theoretical horizons of *juoiggus* ‘as more-than-music’ into the sphere of practice, this study advanced a methodology of ‘listening-with’ rooted in the osmotic exchange and sense of togetherness that are inherent in stories and *juoiggus* (cf. Jensen 2020) (see ‘Listen-with care’ and ‘Muitalusat guldaleami birra’). Such a posture of listening engages academic research with reciprocal responsibilities, inviting to know the world and its relations “differently”. At a time when conventional scientific frameworks fail to address or even exacerbate planetary breakdown, theories and methods rooted in linear objectification appear increasingly inadequate. Top-down terms like ‘music’ and ‘sound’, as conventional ethnographic descriptors of *juoiggus*, similarly fall short, stripping *biegga*, *čuoika*, *mohtorgielká* and other Earth beings from their recognition as rightsholders to the same, bioculturally shared *juoiggus* heritage. The three case studies presented in this thesis (1. *Biegga* [wind], 2. *Čuoika* [mosquito], 3. *Mohtorgielká* [snowmobile]) have highlighted through sonic relations in-practice how settler perceptions have led to ontological and acoustemological discrepancies, endangering the consulted other-than-human subjectivities and their broader echosystem. With its animacy and capacity to joik dismissed, *biegga* is heard solely as a discrete, controllable resource. Fossilized as a nuisance, *čuoika* becomes something undesired and easily swatted away. Labeled as acoustic pollution, *mohtorgielká* has its local technophonic significance overlooked, with the risk of potential harm through erasure or ecoacoustic restriction. In contrast, Sámi histories of listening weave

positive relationships with the other-than-human, constructing an interconnected echosystem where each entity, place, and event relates through privileged sonic bonds – *luod̥it* – that foster inter-subjective kinships. Beyond presenting isolated idiosyncrasies and sonic conflictualities, in fact, *biegga*, *čuoika* and *mohtorgielká* reveal essential sonic relationships and ecological reciprocities, within the *bohccuín* echosystem – described as a network of multispecies sonic interactions that moves “with the reindeer”. The wind, an ever-present caretaker, provides the reindeer with an enduring compass, guiding them along ancestral trails. The mosquito, or “son of the wind”, provokes the reindeer pushing them to graze on the prosperous pastures atop the *duoddarat* during summer. The snowmobile, in turn, inherits the role of the mosquito during the winter, also driving the herd from behind.

In conclusion, (in)conclusion. The histories of listening and acoustemologies presented in this thesis demonstrated how *juoiggus* resists any singular or inert definition, challenging prevailing assumptions in dominant academic research. The nature of *juoiggus* suggests “no beginning and no end” – even to attempts at its own definition. It encompasses all that has been discussed here and yet remains beyond it. *Juoiggus lea eanet go musihkka*.

Figures

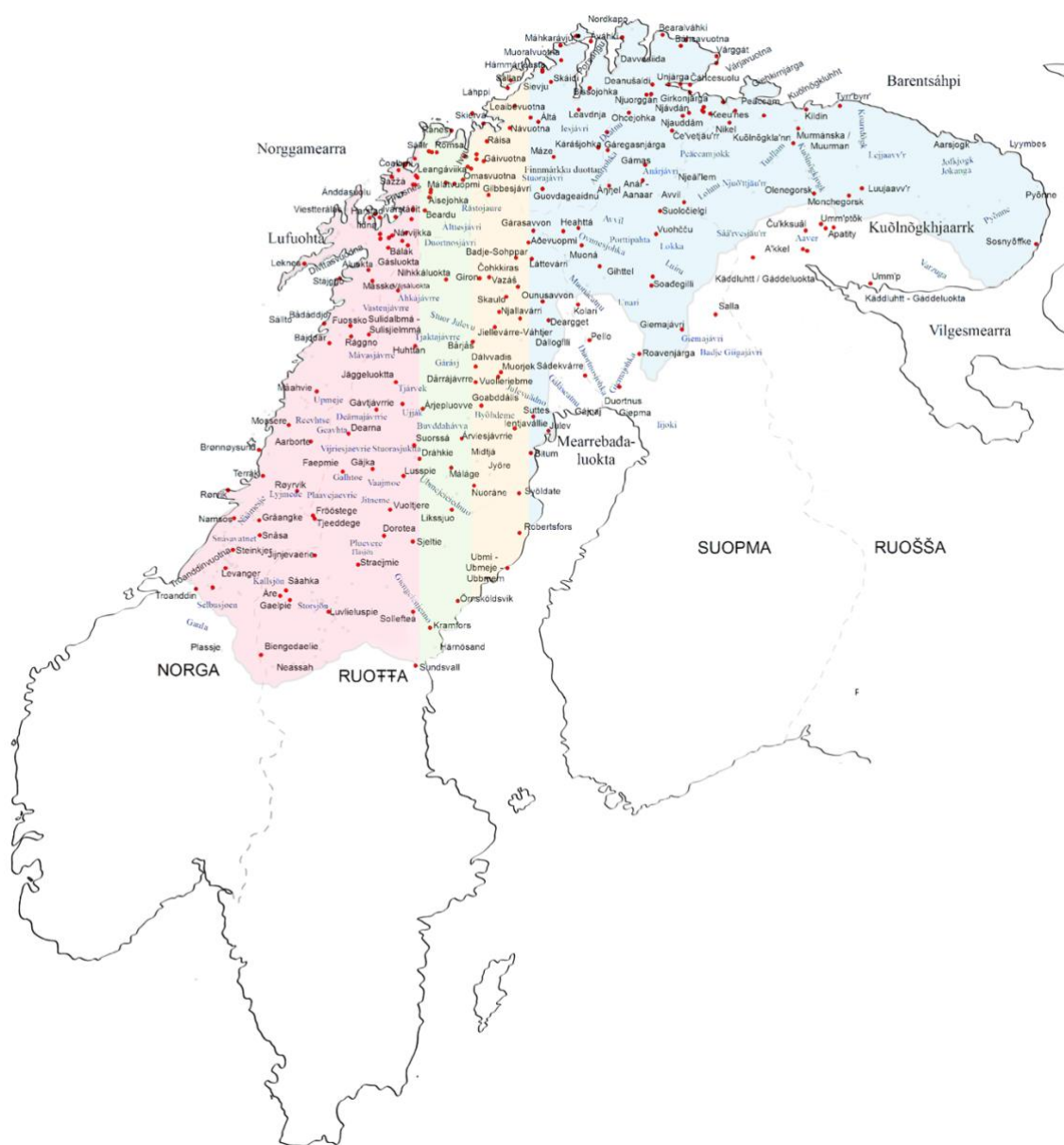


Figure 1 Map of Sápmi with place names in the respective Sámi language (based on cartographic data from Nordregio).

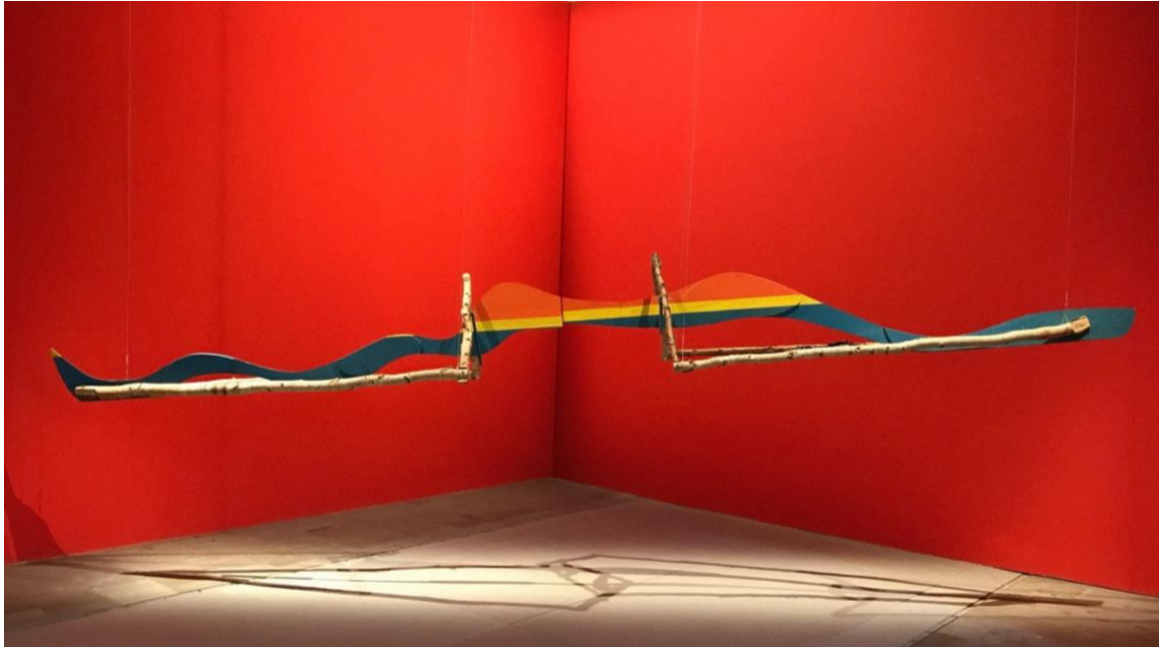


Figure 5 Gaup, Aage, *Sculpture I & II*, 1979, Wood, paint, screws, and wires Nordnorsk Kunstmuseum, Tromsø, Norway (featured at *The Milk of Dreams* – 59th International Art Exhibition La Biennale di Venezia, April 23 – November 27, 2022) (Renzi 2022).



Figure 7 Roman Iakovlev holding a super-cardioid microphone (Sennheiser ME66) during one of the dialogic recording sessions (Guovdageaidnu, 13.08.2023) (Renzi 2023)



Figure 8 Arina Shaborshina sampling her *risku* during a ‘Duoji jienat’ workshop (Renzi 2023).



Figure 9 Omnidirectional stereo (A-B) field recording setup at Niipavárri, Muosát (Renzi 2023).



Figure 10 Omnidirectional stereo (A-B) field recording setup at turbine T9, Havøygavlen, Ávvá (Renzi 2023).



Figure 11 Omnidirectional stereo (A-B) field recording setup at Leviduottar, Levi (Renzi 2022).



Figure 12 Fishing sounds with hydrophone at Álttávuonna, Áltá (Renzi 2023).



Figure 13 Recording wind-water interactions with hydrophone at Bállásjávri, Muoná (Renzi 2022).



Figure 14 Underwater recording of the rattling sound from the trap-fence system installed in Deanušaldi to prevent pink salmon (*Oncorhynchus gorbuscha*) from migrating up the Deatnu (Renzi 2023).



Figure 15 Geophone recording of water running under thin ice at Vuorašjohka, Ávzi (Renzi 2023).



Figure 16 Geophone and contact recording of snow being windswept on frosty ground in Guovdageaidnu (Renzi 2023).

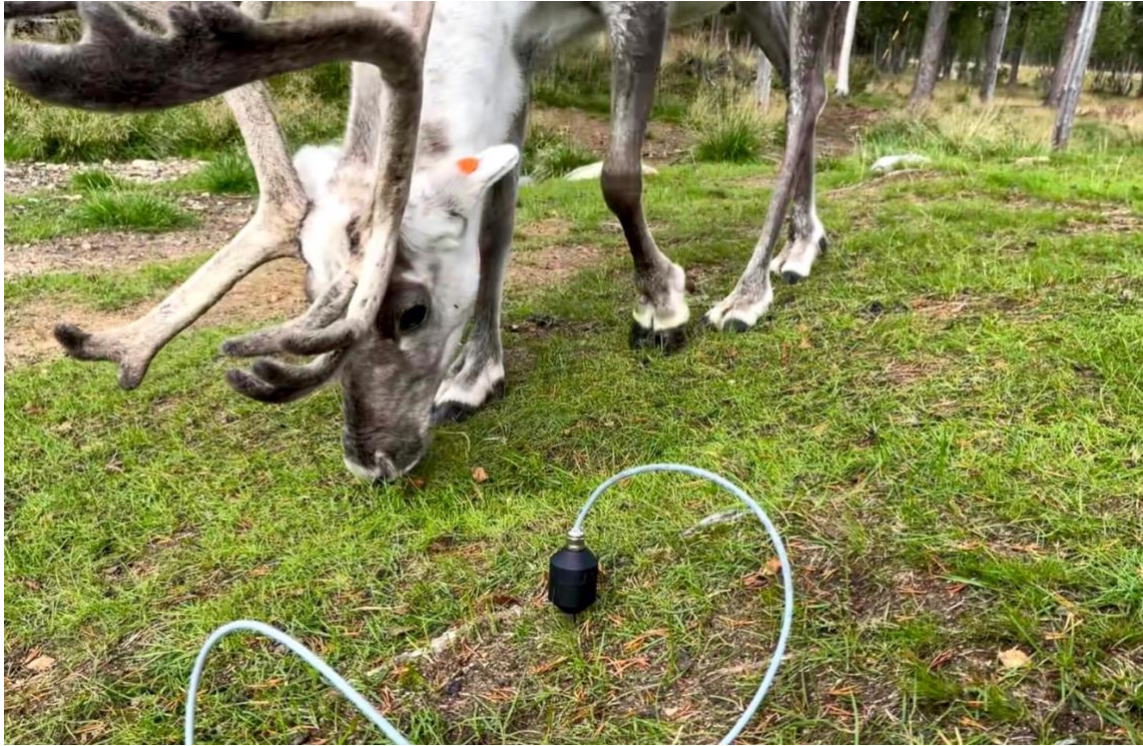


Figure 17 Spiked geophone picks up soil vibrations from reindeer feeding on green grass in Avvil-Máhtte (Renzi 2023).



Figure 18 Contact mic clipped to a branch picks up tree-wind interactions on top of Leviduottar, Levi (Renzi 2022).



Figure 19 Breakdown of the “Aural Tree” technique, at Buolbmatjávri (Renzi 2023).



Figure 20 Gust of wind (*biegganjunni*) lifts the snow in Skáidi (Renzi 2023).



Figure 21 Roman Iakovlev whistles to summon the wind at Guhkesjávri, Guovdageaidnu (Renzi 2023).



Figure 26 Geophone picking up vibrations from inside the turbine T9, Havøygavlen, Ávvá (Renzi 2023).



Figure 28 Demonstrations against the wind power industry on Sámi lands, Guovdageaidnu (4/3/2023) (Renzi 2023). The poster on the left reads, 'Fovsen today – Us tomorrow. Sápmi together,' while the banner on the right poses the question, 'Wind power or reindeer herding?'



Figure 29 Alta hydropower plant, at Čávžu, Áltá (Renzi 2023).



Figure 33 Listening and recording with čuoika at Govddaluovttafávli, Guovdageaidnu (Renzi 2023).



Figure 34 The first mosquito of 2023, on April 8, outside my window in Guovdageaidnu (Renzi 2023).



Figure 35 “Results” of embodied research with mosquitoes at Govddaluovttafávli, Guovdageaidnu (Renzi 2023).



Figure 36 'Sámi Airforce' souvenir magnet sold at the Kárášjohka's Riddu Duottar Museat (Renzi 2024).



Figure 41 Fishing sounds in Suoidnesuolu, Guovdageaidnu, with a geophonic sensor spiked in the ice and an hydrophone dropped inside an ice-fishing hole (Renzi 2023).



Figure 43 Early Sno-Tric snowmobile musealized at the Guovdageaidnu Riddo Duottar Museat (Renzi 2023).



Figure 43 Lynx Forest Fox snowmobile musealized at the Anár SIIDA – Museum and Nature Center (Renzi 2019).



Figure 43 Recording silence where the forest ends. Clear-cut on Airvaaravägen, Vazáš (Renzi 2023).

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Appendices

Appendix I. Fieldwork's equipment

Device	Type	Application	Pros and cons
Zoom F3	Field recorder, 2 XLR inputs / 32-bit float (max 192kHz)	Drop rig for HQ stereo recordings with Clippy EM272	32-bit recording for wide dynamic range; lowest self-noise; quick power on; durable Only 2 inputs; unhandy graphic interface
Zoom F6 ^{*318}	Field recorder, 6 XLR inputs / 32-bit float (max 96kHz) or 24-bit (max 192kHz)	Multi-source recording with Sennheiser ME66, H2d, Geofon, Korg CM-300	Similar to F3 but more inputs to record more than 2 mics at the time. Better manageability. 32-bit rec only at 96kHz
Zoom F1-LP	Field recorder with 3.5 mm Lavalier mic / 24-bit (max 96kHz)	Lavalier to record interviews	Portable Only 24-bit
Zoom F2*	Field recorder with 3.5 mm Lavalier mic / 32-bit (max 48kHz)	Lavalier to record interviews	Portable and 32-bit Max 48kHz; no screen
Tascam DR40	Handheld recorder, 2 XLR inputs + 2 built-in cardioid mics / 24-bit (max 96kHz)	Used for backup recordings of interviews and stereo X-Y recordings at close range	Adjustable pair of cardioid mics Very noisy pre-amps; handling noise; low sensitivity of mics
Zoom H1n	Handheld recorder, 1 3.5mm input + 2 built-in cardioid mics / 24-bit (max 96kHz)	Used as input for the Roland CS-10EM	Only recorder with plug-in power for 3.5 mm Very noisy; low sensitivity of mics
Zoom H3-VR	Handheld ambisonic recorder with 4 built-in cardioid mics in a 4-axes array / 24-bit (max 96kHz)	First order ambisonic recordings for full-sphere surround sound recording	Built-in ambisonic (w/ decoder); Low sensitivity of microphones and self-noise

³¹⁸ * Deemed necessary to integrate to the equipment after moving to Guovdageaidnu on December 30, 2022.

Sennheiser ME66	Super-cardioid “shotgun” microphone (XLR)	Isolating distant sound sources (mostly used for bird songs and joik performances)	Good sensitivity of capsule Handling noise; difficulty to aim for target in open environments; fragile in cold and humid weather
Micbooster Clippy EM272 (x2)*	Matched pair of omnidirectional microphones (XLR)	Used as matched stereo pair in A-B position at 50cm from each other (on stereo bar or clipped to other surfaces)	Top sensitivity of capsules; lowest self-noise; low handling noise; durability in every condition; good frequency response; short cables for A-B recordings
Roland CS-10EM	Binaural microphone and in-ear monitor (3.5mm)	Binaural soundwalks	In-ear monitor Low sensitivity; plug-in powered
Sennheiser Ambeo Smart Headset	Binaural microphone (Lightning)	Binaural soundwalks	Better sensitivity and lower self-noise than the Roland No in-ear monitor
Korg CM-300	Clip piezoelectric contact microphone (1/4”)	Clipped to branches and other thin sources like Sámi handcraft	Integrated clip system; cheap but good response to high frequencies Weak clip; handling noise
LOM Geofón	Omnidirectional geophone (XLR) with accessories (magnet, suction cup, spike)	Capture faint vibrations in various materials and even soil. Applied to metal machines with magnet or to pick up ground, ice, or wooden vibrations through a spike	Device for scientific measurements; top sensitivity High handling noise; extreme low frequencies
DIY Hydrophones (x3)	Piezoelectric waterproof capsules (3.5mm)	Used for back-up or stereo hydrophonic recordings Ice and freezing recordings	Cheap, expendable for extreme conditions Limited sensitivity and not optimal frequency response
Aquarian H2d Hydrophone*	High-performance hydrophonic sensor (XLR) – 3m cable length	Used to capture underwater sounds, rain drops and melting snow	Device for scientific measurements; top sensitivity; sturdy Short cable (3m)
Passive electromagnetic pickup*	Electromagnetic Pickup (3.5mm)	Used to pick up electromagnetic fields in proximity of windfarms, dams and mines	Cheap, but good sensitivity; suction cup Old; short and faulty cable

Other relevant gear

Gear	Description
Sony MDR-7506	Professional monitor headphones
Rycote 055210 ME66	Foam windshield and fur windjammer
Gutmann for H3-VR	Windjammer
Rycote FCo75 and FCo71 (x2)*	Foam windshield and fur windjammer
Rycote Clippy lyre holder (x2)*	Lyre holders
König & Meyer stereo bar 51 cm*	Folding Stereo Bar
Boya BY-WS1000*	Blimp and windjammer
Zoom PCF-6*	Protective case for Zoom F6 recorder
Smallrig 3935*	Aluminum tripod 43-180 cm
Basic tripod	Plastic tripod 30-140 cm
Lammcou gorillapod	Flexible tripod
Smallrig 1859	Shock mount for shotgun microphones
Adapters and splitters	misc.

Appendix II. ‘Muitalusat’ from *Muitalusat guldaleami birra*

Johan Sara Jr.

Man dihte dat šaddai nu ahte mun šadden diekkar jietnaolmmoš³¹⁹

<i>Mu namma lea Jore Juhána Juhána Juhan.</i>	My name is Jore Juhána Juhána Juhan.
<i>Mu namma lea Juhán Sara Jr.</i>	My name is Johan Sara Jr.
<i>Dat lea artista namma maid mun geavahan.</i>	That is the artist name I use.
<i>Ja dal áiggun mu vásáhusaid oktavuodas dán jiena máilmmi birra muitalit ja mo mun lean barggan.</i>	And now I am going to talk about my experiences with this world of sounds and how I work.
<i>Da álggii dalle go mun ledjen manná, bárdni, vihtta jagáš.</i>	It all started when I was a child... a five years old boy.
<i>Mun ledjen hui ángir studeret dán maid eadni lávii hommet, áidna son lei hui ángir fas báddet eará juoigít ja maiddái iežas go juoigii.</i>	I was very eager in learning the things my mom used to do, and – you see – she was very interested in recording others juoigít and herself when she joiked.
<i>Ja sus lei diekkár eronamaš apparáhta mii lei hui stuoris ja hui olu boaluid das ledje vel.</i>	And she had a special tool which was particularly large and had a lot of buttons.
<i>Ja dás lei dákkár jorba stuora báddi mat ledje dán nalde.</i>	And it had a huge round tape on it.
<i>Ja vel okta diekkár čáhppes kábela mas lei dákkár mikrofona maid lei gehčes maid lei bidjan sisa dien ápparatti ja mun muittán dan nama maiddái dien spilláris, dá lei Tandberg namma das.</i>	And it had also a black cable connected to a microphone... and I remember the name of this record-player... Tandberg was its name.
<i>Ja dá orui leamen hui erenoamáš mašiidna.</i>	It seemed to be a very special machine.
<i>Go de báddet dáid iešguđet juigiid iežaset ja de mañjel spillet de bođii jiena das.</i>	When it recorded the different juoigít and then later the sound came out of it.
<i>Da bođii olggos fas mii lei báddejuvvon dohko, mii lei bidjejuvvon dán mašiidnii.</i>	What came out was what we had recorded, what we had put into the machine.
<i>Ja da lei maiddái earunamaš.</i>	That was very special.
<i>Mo hearrat da sáhtii de darvanit?</i>	How could it be stuck in the machine?
<i>Okei, da lei varrá dan báddi mii dahke ahte jietna dárvanii.</i>	Okey, so it was the tape which made so that the sound could be fixed...
<i>Ja dien ferten maiddái ieš gehaččalit, ja mo mun galggen dien gehaččalit muhtolahke oaččut sisa?</i>	And that was something I had to test out myself, and how was I supposed to try and get it in?
<i>Juo, da lei okta vejolaš, mun ii sáhtten jearrat eadnis mo diedán ahte son ii livčče attán lobi čuoggut dan mašiidna, divras mašiidna, sihkkarit.</i>	There was a possibility, but I couldn't ask my mother because I know that she wouldn't let me touch the machine; the very expensive machine probably.
<i>Mun in diede man olu dan mávsii muhto da lei sutnje goit hui divrras ja ii luoittan earáide lahka dien mášidnii, eará go báddii mikrofonii, de fertii lahka čuohkat dan olbmái dien mášidnii.</i>	I don't know how much it costed but it was for her very precious, and she didn't let anyone close to the machine, apart from when she was holding the microphone, then she had to sit close to the person with the machine.

³¹⁹ “How I became such a man of sounds”

*Mun studeren juohke beaivvi, juohke háve go son báddi.
Makkár buollut son deaddilii, manai go manasguvlui vai ovttasguvlui?
Ja olles fartain.
Ja makkár čuokkut iđisteagget go čuokkut died boalluid ja go lei makaš diekkar bádden oassi dahje báddenmodus de lei rukses čuovgá ja dat nállu lihkanii ja manai sulli gaskku dego donkdonkdonkdonk.
Dan maid váruhit.
De lei moadde boalluid maid galgge skruvvat dien jietna bajas vai vuolus nu ahte jietna ii šaddan bearre garas go manai sisa. Ja de beare unnan.
Da fertii nie gaskku munnai dárvanit.
Ja galggi máiddai vebaš sádji dien báddi mii lei dien nalde.
Ja mun dál studeren oba guhká ja hui olu, ja mo dat dal bodjui ja bidja ala.
Ainna eadni lei hui ángir báddet luodit, ja báddet máiddai historjât maid earát ledje muitalan.
Ja da ledje máiddai diekkar čeahppes muitaleaddgit maid lávedje min mánat suorganahit bealle jámas go lihkka ja bijai diekkar storra čálmmiguin ja lei hui skummelt.
Hui diekkar jáskes jietna ja de fahkestaga njuikii ja mii suorganahit bealle jámas.
Nu ahte diekkar áššit báddi maid, nu ahte dat lei fiera makkar.
Ja nu son dagai mannga jági, mannga jági dagai dan, ja ieš maid juigii hui ángir.
Ja dat jámii maid dán giđđa, ja dálvet mun viimmat álgen daid mannga mannga mannga kassat digitaliseret.
Ja mun barga ovtta vahkku, digitaliseren ovtta oassi dán maid dat lea bádden guđalogi rájes gittá ovccilogi rádjai, ja sihkarit vebaš mannelaš maiddái.
Muhto okei, de lei goit dien ášši, go dat báddii.
De lei ovtta beaivvi, de manai rámbuvrii gávppošit biebmui.
Ja de lei mus unna-vieljja, dat lei guolbma jági nuorat go mun.
Mun ledjen vihtta ja son ledje guokte.
Ja eitto oahppan hupmat vehá, ii at da lei bearre haga maid nágodii hupmat diedusge, muhto vehá goit.
Ja go manai rámbuvrii de mun lohken viljii, “gula dál, mii báddet dán mašidna.*

I watch it carefully every day, every time she would record.
Which buttons she would press; did they go back or up?
And with a full speed.
And what signals you get when she pressed those buttons, and when it was recording or in a recording-mode, there was a red light and the needle started to move, and went more or less in the middle like donkdonkdonkdonk.
That was also to be aware of.
There were some buttons that were going to set the gain up or down so the sound wasn't too high or too low.
It had to be in the middle.
And there also had to be left a little bit of space on the band.
And I was studying for a long time, and a lot, how she set it up.
Mom was very interested in recording luodit, and the histories that others had told.
And there was also a very talented storyteller that would scare us half-dead when they would move and put on big eyes, in a very scary way.
First there was a very quiet sound, and then he jumped, and we were scared off.
So, she also recorded that kind of stuff.
And so she did for many years, many years, and she herself was dedicated to joiking too.
And she died in the spring. And in the winter, I finally started to digitalize many, many cassettes of recordings.
I worked for a whole week, digitalizing a part that she had recorded from the 60s to the 90s, and probably for some time after that too.
But okay, that was that story... when she recorded.
It was one day; she had left to buy some groceries.
And I was with my little brother, who was three years old younger than me.
I was five years old, and he was two years old.
He had just learned to talk a little, not so much of course, but a little.
And when mom left for the grocery-store, I tell my little brother “Listen, we record with the machine.
I am now a journalist, or I am going to ask you

*Mun lean dál journalista, dahje mun jearran
dus ja don galggat vástidit.
Ja jus ii nágo vástidit, de mun veahkkanhan
du, maid don galggat vástidit".*
*Ja de álgii, deaddiliin dien ja dien boalluid, ja
geahččalin dien mikrofona, okei dat ii manai
rukkes da lei varrá nohka jietna, ja rukses
boallu idistii go deaddiledjen dien ja dien
vulus ja báddi álggii jorra.
Ooo, de lei dien 'action!'
Ja de jerren: "leatgo dus olu
bohccuid?"
Fertedjen lohka sutnje "loga juo".
"juo".
"Lihkut go bohccuid?"
"Juo" logai.
Noo, ja diekkar gažaldagaid.
Mun in muite juste muhto loahpas mun goit
moadde sátniguidd maid mun ledjen dárogilli
oahppan.
Ja da lei sullii, movt da sáhttii leat.. "Den kan
ikke være ... for lovende det er forbudt".
Diekkar sánit varra lei.
Juo ja de go gearggaime de bidjet eret visut.
Nu ahte mii leimmet hui jaskkat go eadni
bodii, nu ahte eai mii leaimmet boastu
dahkkan, ii fal ii maidege.
"No mo manná dáppe?" (eadni jearrá).
"Manná bures".
Hhmm.
Ja de mánga váhku mánnjil de lea eadni váldan
dan spillera fas ja de guldala čada.
Maid hearra dál gullo?
Da lea jienat.
Ja makkár, gii bat dál leat hupman?
Doai gat leaba hupman?
Ja son dieđusge dovddaid daid jietnat munnos
ja eai moai sáhtte nektet dahje dieinna lágat
dadjat ahte moai ean lea dahkan dán.
Nu ahte juo, mii prøveime, ja ieš dat álgii
rešket go guldalii olles dán oasi, bádden oasi
ja rešken ja dasa lei nu somá ahte mii leat
dien dahkan.
Da lei dien ášši.
Dálvet go digitaliseren daid jietnat, de gulán
fáhka, ahte lea ealu luhtte.
Mis han leat bohccuid, áhčči han barggai
ealuiguin, Ja mis lei geasseoruha doppe
Stiertnas.
Ja doppe áittii siste čakčča go čohkke ealu ja
mearkumin daid, de gulan, de lei eadni váldan
mielde dien spillera, das lei varra batteriat
doarvai ahte sáhttii báddet dien.
De lei bádden bohccut jietnat.*

questions and then you are going to answer.
And if you can't answer, I will help you with
what you are gonna say".
And then we started. I pressed the different
buttons, and tested the microphone... Okay, it
didn't go red, so the batteries were probably
empty – we first thought. But then after
pressing a button down, the tape started to
spin.
Ooo, then there was 'action!'
And then I asked, "Do you have many
reindeers?"
I had to tell him "Say yes".
"yes".
"Do you like reindeers?"
"yes" he said.
And that kind of questions.
I don't remember exactly but, in the end, I said
some few words I had learned in
Norwegian.
And it went like this "Det kan ikke være... for
lovende det er forbudt".
The words were something like that.
And when we were done, we put away
everything. So, we were very quiet when mom
arrived, so we hadn't done anything wrong,
not a thing.
"So, how is everything here?" (asked mom).
"Everything is fine".
Hmmm.
And then many weeks after, mom took the
machine and was listening through everything.
What is this thing she is hearing?
It is voices.
And what voice, who's talking?
"Is it you guys who are speaking?"
And of course, she recognized our voices,
and we couldn't deny or say that
we didn't do this.
So yes, we tried, and she started to laugh when
she heard the whole recording, and laughed
because what we had done was so hilarious.
That was the situation.
In the winter, while I am digitalizing the
sounds, I suddenly hear the reindeer.
We have reindeers. Dad worked with reindeer,
and we had a summer place
in Stierdna.
And in the storehouse, during the autumn
when we gather the reindeer to mark then, I
can hear that mom had taken the machine with
her. And she had probably enough batteries so
she could record. She had recorded reindeer
sounds.

Ja det mun jáhkan de lei mun mii ledjen de
 mielde ja mun gulan da lea okte gii hupmá
 doppe ja ... Makkár bohccuid died lei?
 Ja eatni vástida ja nu ja na ja nu han da lea,
 ja de gullen biellu ja gullen jieanaid doppe,
 iešgudelagan jienaid doppe, bohccut-jietnaid
 ja mun ain jearran.
 Soitii mu bieljat muhto leat váttis gullat gii bat
 die lei, iige sáhttan eatnis jearrat go son lea
 jápman.
 Nu ahte dan maid fuobmašin dálvet ahte leat
 olggon leamašan ja bádden olggojieatnaid,
 nugo bohccuid ja diekkariid.
 Ja de ferten fáránii muitalit maiddáa oassi
 man dihte mun lean álggan jieatnaiguin
 barggat oalle áiggá.
 Ja man dihte dat šaddai nu ahte mun šadden
 diekkar jietnaolmmoš ja musihkkar.
 Da lei varrá maiddáa dien oassi ahte mun
 ledjen nu sáhki ja lávedjen lihkkut guldalit.
 Daid juoigiid min luđiid.
 Eronamaš maid Mikkel Bongo, dien streŋga
 laika dege bongo-laika.
 Da lei mu mielas nu eronamaš go lávii
 čeahkkadit spillet dien ovttá streŋga ja de
 juigat vel seammasin.
 Muhto maid mun maiddáa eronamaš doppe
 Stiernas sullos giđđa go mii leimmet áhččiin,
 mun ledjen bárdi, ovcci, logi jagaš.
 Mii láveimet máŋŋga beaivvit doppe guldalit,
 gihkarastit miesit.
 Ja de ligai áhčči munnje, dál áiggu guldalit ja
 dan maid don galggat guldalit lea, leago dus
 stuorra bohccuid? Hearge-biellut? Leato
 ninjulaš-biellut? Dege dovvtos bohccu-
 biellut?
 Ja nu ain.
 Áhččii lávii bidjat biellut dákkar lodjus-
 bohccuid, ninjelaš bohccuid ja álttii máiddai
 ja de hearggiid máiddai.
 Nu ahte gálggai dovddui dego guldala ealu
 dálvet ja gullá visut bielut de lei máhkaš dego
 čeahkkis olles eallu.
 Ja mun galdalin ja vielladin várri nalde ja
 geahččan áibmu ja geahččan iešguđet lottiid
 girde bajabealde ja gulán maiddáa seamams
 daid biellut, klong klong. Klong, klong,
 galong, klong, klong, grrrrr, kling kling.
 Ja go de álgen lihkadit vehá de šaddén
 eambbo jietnat eambbo biellut ja sáhttii
 leahkkit divrrut maid givssedje deaidda.
 Ja go lei hui ráfi go guhte doppe, de gulan
 dušše moadde beallut iešguđet guovllus.
 Ja hui árgasa.

And then I believe I could hear myself being
 there, and I hear there is someone else there
 talking... and “What kind of reindeers were
 there?” And mom gives the answer, and then I
 heard a bell and I hear sounds there, different
 kinds of sounds. Reindeers-sounds and I
 continue to ask questions.
 It might be my ears, but it is hard to tell
 who it was, and I can’t ask mom because she
 is dead.
 So that I realized this winter that we had been
 outside and recording outdoor sounds, like
 reindeers and so on.
 And then I have to tell you part of why I
 started working with sounds
 a long time ago.
 And how I became such a man of sounds
 and a musician.
 It was probably the part that I was so curious
 and loved to listen.
 To listen to our luodit.
 Especially those of Mikkel Bongo, from that
 string-laika or bongo-laika.
 It was so special for me that he used to tune
 that one string and at the same time joiked
 along with its sound.
 But also what I listened when I was on
 Stierdna island in the spring, when we were
 with our father and I was a nine or ten years
 old boy.
 We spent many days listening and watching
 the calves through the binoculars.
 And then my dad told me, “Now you are going
 to listen, and what you are going to listen is:
 do you have big reindeer? Driving reindeer
 bells? Are those female reindeer bells?
 And so on.
 Dad used to put bells on the tame reindeer, the
 female reindeer, the mother reindeer and the
 driving reindeer.
 So, you started to feel the reindeer and
 recognize all the bells, and that was like
 gathering all the reindeer.
 And I was listening and lying on the mountain
 staring at the sky and at different birds, how
 they flew over me, while listening to the
 sounds of the bells. Klong, klong, galong,
 klong, klong, grrrr, kling kling.
 And then I started to move a little, and got
 more sounds, more bells, and could have been
 also the insects who tormented them.
 And when it was very peacefully, I could just
 hear some bells from different directions.
 And very familiar.

*Ja muhtumin de lihkkasteaddje oaivii daid
divriid dihte ja de lihkkadii daid beallut go
dabalaš.*
*Nu ahte da lei hui earonamaš guldalit daid, ja
dan planen studeret go ollesolbmot šadden.*
Gos mun lean oaččun died?
*Dieid, jus mun sáhtan lohkat attaldagaid
guldalit.*
Da lea eatnis ja áhččis.
*Dan dihte mun šadden musihkkar go da ledje
muhtin láhke, iešguđetláhke mielde, mu
oahpahamin ieažaset sin sámi kultuvrra
oktavuođas ja sin jurddašin oktavuođas.*
*Mo guldalit sámi mushikka, sámi kultuvrra,
sámi jietnaid, daid maid gávdnoedje.*
*Ja gievahit dáid iežasetlágan vuogiin mielde,
neavvut mot áiggu gullut ja man birra áiggui
guldalit ja maid áiggu guldalit ja nu ean.*
*Ja nu han dan šaddai mu eallin loahpa
loahpasa.*
Mun sádden dan maid mun šádden.
*Ja luohiti bođii munnje go mun ledjen
ollesolmmoš ja gearrgan studeret musihkka,
de bođii munje dego min árbeskiejka, min
stuorra gistu, gollegistu, gos sáhtte ain burget
ja ain čoagget daid golliidjietnat, daid golliid
maid gávdnohit mii oba nasiige noga.*
*Ja de lea da mu bearaš ja mu sámivuohka mii
lea munnje hui dehálaš.*
*Ja de mun oaidnan daid ja dovddan daid
jietnat ja de dieđan mat áiggu šáddat, makkár
prošeakta galggat šáddat ja dien ja dien
gáldus.*
*Ja gollegiisas, maid mun áiggun ohccat doppe
dan háve go vuolggan ráhkat juoga doppe,
doppe lea nu olu.*
*Ja inge mun sáhte mu olles eallináiggis oba
nassiige ollet visu maid mun lean dieđan dege
háliidan čadahit, daid prošeaktaid.*
Mun lean dušše álgguráidis.
Juo da lei dat.

And sometimes they turned their head because
of the insects and the bells in turn made some
other sounds.
So, it was very special to hear that, and that
was something I planned to study more as I
grew up.
Where did I get this?
This, if I can say it like that, gift of
listening.
Its from mom and dad.
That's why I became a musician, because they
were somehow, in different ways, teaching me
about their connection with Sámi culture and
beliefs.
How to listen with Sámi music, with Sámi
culture, with Sámi sounds, what they found.
And use that in different ways,
advise how to listen and
what to listen to, and so on.
And that's how this came to be my life,
eventually.
I became what I am.
And luohiti came to me in my adulthood, when
I was done studying music. Then it came to
me like a traditional-present, our big chest,
gold chest, where we can still dig and count
the golden sounds, a gold that exist and never
disappears.
And then it is my family and my Sáminess that
is very important to me.
And I see them and feel the sounds, and know
what it is going to be, what kind of projects
will come and which kind of sources I get.
And the gold chest is also where I go looking
for the next time I make something,
there's so much.
And neither can I, in a single lifetime, achieve
all the things I've known or want to do, and all
those projects.
I am only at the beginning.
Yeah, that was it.

Mai Britt Utsi

Jus eai boade mihcamárat, de goit bohtet dalle guovtti soabbai³²⁰

<i>Na lo, le, loi, lei, loi-le, lo</i>	Na lo, le, loi, lei, loi-le, lo...
<i>Ja mihcamáraide jo guovtti soabbái</i>	And at Midsummer on two sticks
<i>Na lo, le, loi, lei, loi-le, lo</i>	Na lo, le, loi, lei, loi-le, lo...
<i>Ja sápmelačča buoremus jo biigá</i>	The best maid of the Sámi
<i>Na lo, le, loi, lei, loi-le, lo</i>	Na lo, le, loi, lei, loi-le, lo...
<i>Ja bieggabárdni lei jo láidesteadđi</i>	And the bieggabárdni was the leader
<i>Na lo, le, loi, lei, loi-le, lo</i>	Na lo, le, loi, lei, loi-le, lo...
<i>Ja čuoikanieida lei jo vuojeheaddji</i>	And the čuoikanieida was the driving force
<i>Na lo, le, loi, lei, loi-le, lo</i>	Na lo, le, loi, lei, loi-le, lo...
<i>Na lo, le, loi, lei, loi-le, lo</i>	Na lo, le, loi, lei, loi-le, lo...
<i>Ja golbma vieljaža jo ledje,</i>	The three mosquito brothers
<i>Na lo, le, loi, lei, loi-le, lo</i>	Na lo, le, loi, lei, loi-le, lo...
<i>Ja okta heavvanii jo mielkegivlui,</i>	One gets stuck in a tar bucket
<i>Na lo, le, loi, lei, loi-le, lo</i>	Na lo, le, loi, lei, loi-le, lo...
<i>Ja nubbi darvánii jo bihkkalihtái</i>	One drowns in the milk trough
<i>Na lo, le, loi, lei, loi-le, lo</i>	Na lo, le, loi, lei, loi-le, lo...
<i>Ja goalmmát hávkkai suova sisa jo,</i>	One suffocates by smoke
<i>Na lo, le, loi, lei, loi-le, lo</i>	Na lo, le, loi, lei, loi-le, lo...
<i>Juo gos dat vulge ja bohtet dat čuoikat</i>	Where do they come from, and where do they
<i>Sápmái, dat oaivildit deike davás, dat cuoikkat</i>	go, these mosquitoes in Sápmi? What do they
<i>lea son, dat lea ‘she’, son, dat mitalit dat</i>	signify here in the North? And why is the
<i>nieida.</i>	mosquito referred to as ‘she’, as in a girl? It
<i>Dat bođii Lulli-Suomas, ja dat lei heavdni gii</i>	came from Southern Finland, where the spider
<i>muitalii čuoikkaide</i>	told the mosquitoes about a place,
<i>doppe Lulli-Suomas ahte doppe gávdu</i>	or rather a region far up in the North, where
<i>muhtin báiki, muhtin</i>	the Sámi live, and where there live reindeer,
<i>guovllu, dohko lea guhkki doppe lea davás,</i>	fat reindeer, fat fishes, and where riverbanks
<i>doppe orrut samiid, ja doppe lea bohccot,</i>	and lakesides are in such nice condition.
<i>buoiddes bohccot, buoiddes guollit, ja doppe</i>	So then, mosquitoes set out, but three of their
<i>daid johkagahtiis ja javregahtiis alas doppe</i>	brothers disappeared, or rather they could not
<i>lea aibbas fiina dillii.</i>	be found.
<i>De golbma čuoika vieljazagat vuolgge, je de</i>	One of them drowned in the milk trough,
<i>dat jávke, dat lahppodedje dohko, okta</i>	another got stuck in a tar bucket, and the third
<i>heavvanii mielkegivlui, nubbi ovttá</i>	was suffocated by the smoke inside a lávvu.
<i>bihkkalihtai darvanii, ja guolbmat hávkkai</i>	Regardless of the circumstances,
<i>suova sisa ovttá lavus,</i>	they all vanished. Seeing they weren’t coming
<i>muhto goitge dat dahpahusaid nu ahte</i>	back, the other mosquitoes began to worry.
<i>lahppodedje. De dat eará čuoikkat alge</i>	When the spider returned, she said she
<i>jurdašit gos dat leat, gos dat šadde, ja de bođii</i>	couldn’t tell where they had disappeared to.
<i>dat heavdni fas dohko ja logai son ii dieđe</i>	Despite the concern, the mosquitoes said,
<i>gosadat leat šaddan, son ii sahte mitalit</i>	“Fine, we’ll go find them”.
<i>Ja de lohke buhtá doppe, mii vuolggit ohccat,</i>	And so every one of them came here
<i>ja de bohte deike ja eai leat šat mannan eret</i>	and never
<i>goassege...</i>	ever left...
<i>Danin mis leat cuoikkat.</i>	That’s why we have mosquitoes.

³²⁰ “If they don’t come by midsummer, they’ll come with two sticks”

*Ja jus eai boađe mihcamárat
 de goit bohtet dalle guovtti soabbai.
 Dal bođii dan áigi ahte lea čuoikii.
 Na dieđusge sámi maid eai dieđusge liiko ahte
 čuoikka manná deiki bealji maddagii dahje
 riihtet dahje muogir.
 Ja dieđusge mii geahččalit mii maid sudjet
 iežamet dan čuoikka vuostá.
 Ja olbmot han mahtte čuoikka luodiid ja daida
 ii beroš čuoikka,
 mun in borahalla čuoikka ii baljo goassege.
 Muhto mun láven vehá várret daid čuoikka
 daid sujiin, nugo das da čuoikkagáhpri, dego
 čuoikka rakkas, cuojka rásii, suovastit
 čuoikkaid.
 Ja čuoikkagáhpri, da lea diekkar assehis dinga
 bivttas maid don bijat oaivai, oaivi nala amma
 nu.
 Ja čuoikkarákkas dat lea diekkar sis-tealta
 maid don bijat mahkaš lavui dahje alggos
 murrii čanat go don áiggut nohkat.
 Ja čuoikkarássi, guohca rássi, da lea diekkar
 don leat dat maid mii gohčodit gouhcarássi,
 dahje čuoikarássi.
 Go don váldat dan na lieđit ni, ja de cuvke dan
 ja ne, de čuoika vuolla. Čuoika ii liiko dan. Jo
 ja sihke dat lastat ja lieđit lea dan ávki, de lea
 latina namma,
 Ledum Palustre.
 Ja de lea daid čuoika luohiti.
 Na ii go mun juoigan dalle ovddi háve?
 Ja das da galdut gos don gavdnat vehá daid
 árbevieruid čuoikii birra.
 Muhto goitge da lea oassi sámi luonddus, jus
 čuoikka ii boađe, de ii boađe buorre.
 De ii boađe bahkka lieggas mii
 šadda daid murjiid, guliide
 biebmu ja loddiiide biebmu.
 Doppe lea nu ollu daid dievriid ahte daid
 besset borrat daid.
 Ja čuoikka ja bieggas lea hui dehálaččat.
 Da lea seamma go čuoikka ja boazu.
 Mun lean dan buohtastahttan, juo.
 Aina go boazu lea bieggas buorri ja čuoikka
 lea bieggas bárdni.
 Ne da lea. [bogusta]
 Ja dat čuoikka lea bieggas bárdni, ja boazu
 lea buorre bealli biekkas,
 Mikkel Nils Sara lea čallan
 iezas dohktorgada.
 Ja sadjin masta diesa lasihit,
 boazu lea bieka buorri,
 ja čuoika lea bieka bárdni.
 Ja don diedat, sápmelaš buoremus biiga amma
 nu, don diedat mii dat lea?*

And if they don't arrive by midsummer,
 they'll come with two sticks.
 Now comes a time that is čuikii.
 Of course, the Sámi don't appreciate it when
 mosquitoes, horseflies and other insects,
 get inside one's ears.
 And of course, we also try to shelter ourself
 from mosquitoes.
 And those people who mastered the *luodit* of
 the mosquito aren't bothered by it: I am rarely
 eaten up by mosquitoes.
 But I try to pay attention using some mosquito
 protections, like the *čuoikkagáhpri*, the
čuoikkarákkas, the *čuoikkarássi*, or *suovastit*
čuoikkaid.
 We use the *čuoikkagáhpri*, a transparent hat to
 wear on your head, you know what
 I mean.
 And the *čuoikkarákkas* is an inner tent made
 of thin fabric that you put in the *lavvú* or you
 tie it on a tree when you sleep outside.
 And then we have the *čuoikkarássi*, an herb
 that is commonly known as *gouhcarássi*,
 which means rotten herb.
 When you pick the flower and you crush it, the
 mosquito stays away. The mosquito doesn't
 like that. And its leaves and flowers
 are very beneficial too. Its Latin name is
Ledum Palustre.
 And there is the *luohiti* of the mosquito.
 Didn't I joik it before?
 And that's where you can find out a little bit
 about the traditional knowledge.
 Anyway, it's an integral part of nature: if the
 mosquito doesn't come, no good follows
 either. Warm weather wouldn't arrive either,
 berries wouldn't grow and there wouldn't be
 food for fish or birds.
 With so many insects around, they have a lot
 of nourishment.
 And mosquito and wind are very important
 together. And the same is for mosquito and
 reindeer. I like to compare the two, yes.
 And so, the reindeer is the good of the wind,
 and mosquito is the 'son of the wind'.
 That's how it is. [laughs]
 Mosquitoes being the 'son of the wind', and
 reindeer being a 'good governed by the wind'
 is something that Mikkel Nils Sara wrote in
 his doctoral dissertation.
 So to not mix things up, I can add that reindeer
 is the good of the wind and mosquito is the
 son of the wind.
 And you know, the best Sámi *biiga*, do you
 know who is that?

*Juo, ja bieggá bárdni dat lea dan čuoika mii
láidesta eallu, da manná ovddabealde ja
givsida dan ovddimus bohcco nu ahte dat
rohtastii earat.*

*Ja de lea dien bieggá bárdni gii doalvu
dohko.. da lea Johan Turi girjiis moskito.. Go
dat čuoikat ja daid eará divriid givsidit
bohccuid mannat dohko várregilgii jo ja dat
lea seamma dien dat bieggá bárdni, jo dat lei
dan jodiheaddji ja čuoika šaddá muhtun lahka
dego bieggabárdni,
mii doalvu dien eallu.*

*Ja čuoika nieida lea dan gii vuojeha
manngabealde nu ahte dan eallu manná dohko
várregilgii gos leat jasat doppe beasset eret
čuoikain, [boagusta] juo čohkke dan eallu.*

Jurddaš, nie unni? Ha?

Ja dan fábmui! Wow!

*Dien čuoikanieida, son lei dat gii doalvvui
ovddasguvlui!*

*Dat lea juoga diekkar dan čuoika ja bohcco
oktavuodas.*

*Amma nu, ahte da manai hui .. hui gievra. Ja
do lea čuoika doppe bohccu nalde.*

*Ja dat lei sápmelaččat buoremus biiga, ja dan
luohti dan gullat athe dat lea bieggabárdni ja
čuoikkaneida ja dat vuodjelit ealu.*

Nie lei dat muitalus.

*Čuoikas lea iežas jietna, jus don guldalat don
sahtát gullat ollu luodit doppe,*

jus don veallát olggon,

*lavus ja gullat rággasis siste, don veallán
gulla olggon bealde*

Yes, it is the mosquito that navigate the herd,
it goes in the front and annoys
the first reindeer, which in turn drags
all the others.

And so it is the son of the wind that leads
there, as Johan Turi said about mosquitoes.
Because mosquitoes and other insects tease the
reindeer and push them uphill, this is a role
that earned them the name of son of the wind,
for the wind is the leader of the herd and
mosquito inherits a task very close to this one,
as it leads the herd too.

And then the female mosquito is the one who
driving from the back so that the herd follows
uphill where it's cooler and with no
mosquitoes. [laughs] Together they collect the
herd. Can you believe it, uh? So little... And
yet so powerful! Wow!

The female mosquito, she was such a driving
force!

The relationship between the mosquito and the
reindeer is something like that.

You know, how it goes very very strong, the
mosquito around reindeer.

And so, this was the story of Sámi's best biiga
which, together with its luohti, tells how
bieggabárdni and čuoikkaneida lead of the
herd. That was the story.

Čuoika has its own voice and if you listen
carefully, you can hear a lot of luodit in it. If
you lie outside, or even on this side
of the inner tent in a lávvu,
you can hear it outside:



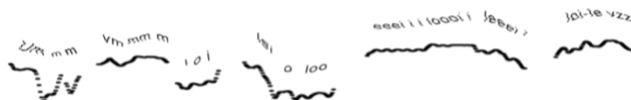
Ahte dies bealje maddagii

jus dus ii leat rákkas!

Ja de don sahtát álgit jurdašit:

And from there it starts getting into you ears
too, especially if you don't have an inner tent!

And so you start meditate:



*[boagusta] Ii go lea duohta, dat lea vehá somá
dat čuoika.*

[laughs] Isn't it true?
It is pretty fun, the mosquito.

Roman Iakovlev

мй югке Сāммь кйлэсьт лй йджесь йнн³²¹

*Мун нэмм лй Роамэнб. Мунн ля пуадтма
Луяввьр сыйтэсьт, Мурман ёмьнесьт,
Сāммь ёмьнесьт Рӯиш пелесьт. Мунн йлле
тамьне малъ ёммп мун ял.*

*ёммп мун ял мунн шоабиэнта култэллэ.
Мунн култэллэ йнэтб... Мунн култэллэ
суметб... ёллей суметб я кырьха
суметб...*

*Мунн сйрре я кырьхэ суметб студиясьт, я
мунн кырьхэ йнэтб оаллкэнб, вāресьт,
поакенб я явьр альн.*

*Ама мањмусс ыгенб мунн эллькэ кяссэдтэ
Сāммь кйлле.*

*Мунн эллькэ лыһкэ, кйһчлэмэнб пынне мун
рōднэ кйл, Кйллт Сāммь кйл. Я тэдта лыһк
выгэ мун тэсса, Гуавдукййина, касьт муст
лй вузйймушии бһпнуввэ тоаййвамушии
оаннэй Сāммь кйл: таввял-сāмь кйл.*

*Мунн юрта, мй югке Сāммь кйлэсьт лй
йджесь йнн , я сыйй лев ёммп мōдже я
тыффкма.*

*Ама Кйллт Сāммь кйлл эйй оанб, я эйй ённэ
олмэдтэ мāһт сāррнэ сāмас
адтб.*

*Тэдт йнн лйй малъ кāдтма я лышишэ вёрьт
300 (кōлм чūdтэ) олмэдтэ мāһт сāррнэ
сāмас. Я тэннуэйкэ мунн лыгка пайнэмэнб
я йлххэмэнб сон.*

*Кйллт Сāммь кйлл лй чофта вāптэгк я
лōссесь кйлл. Тамьне лев сāнб югке ёрк-
ноале гуэйкэ я пырр йжян мыр гуэйкэ.
Вāлльтэ, “выр выр мәннэ” лй кōххт мыйй
цēлдькэнь, куэссь ёммп вōдз лй оауукай, я
куэссь тōнн вāнцак, тōн йōлльк вырр вōдзе
я аннт тэдта йн : “выр, выр”, тōнн вāнцак
чйнулэсь вэзэсьт.*

*Нымьп кōвенб лй сāннб, маньтэ мыйй
оаннэнь вӯзыхэм гуэйкэ нӯдзэ йнэтб. Тэдта
сāннб лй “хōррк”. Я тэдта лй чофта эфт-
налишэм йнэтб , мэйт нӯдзэ аннѳтэв, куэссь
сыйй кāррьксэллэв пырр: “хōррк хōррк
хōррк”.*

*ённэ сāннэ Сāммь кйлэнб лй глāгол сāнб.
Мыйй аннѳтэнь нэмм лыһкмушише. Сыйй
лев лыһкмуж я евла лышишэ сэг. Ныдтб,
“выр выр мәннэ” нӯдэ глāголэсьт “Выррэ”,
маньтэ лй “Вырант валас вōдзе”, ноа
тэдта лй ныдтѳишэ вырант кāрр пйнук йн.*

My name is Roman. I come from Lujávri, a village in the Murmansk region on the Russian side of Sápmi. I lived there almost all my life.

All my life I have been interested in listening. I have been listening to sounds... I have been listening to music... To live music and to recorded music...

I have been playing and recording music in the studio and I have been recording sounds in the nature.

But in the last years I became interested in Sámi languages.

I started working to try to save my native language, Kildin Sámi. And this work led me here in Guovdageaidnu, where I have the opportunity to study the most commonly used Sámi language: davvisámegiella.

I think that each Sámi language has its own sound, and they are all beautiful and interesting.

But Kildin Sámi language has not been promoted and many people can't speak it anymore.

Its sound was almost lost and only around 300 people can speak it.

And this is why I work to preserve and promote it.

Kildin Sámi is a very rich and difficult language. There are words for specific types of weather and environments.

For example, “vyrr vyrr manná” is how we say when the snow is crusty and when you walk your foot sinks in the snow making this sound: “vrr, vrr”, you walk in deep snow.

Another example is the word we use to describe the sounds of adult reindeers. This word is “hork”. And it is very similar to the sound that reindeers make when they walk around: “hork hork hork”.

A lot of words in Sámi languages are verbal words. It means that we give name to the action. They are like a process and not only static. And so, “vrr vrr manná” comes from the verb v'rre, which means “sinking down in the snow”,

³²¹ “Each Sámi language has its own sound”

ын лѣв чофта шўрр туйй Кїллт Сāммь
 кїлэсьт.
 Мун ялэсьт мунн кїлчлэнта пынне Кїллт
 Сāммь ынэтѣ эйй лышишэ кїл пэйель ноа
 ныдтѣшэ лывѣтэ пэйель.
 Лывѣт лї Кїллт Сāммь нāлль лывѣтѣм
 гуэйкэ я мунн мушта, мэнн эххэтэшишт
 мунн кулле вуэмь лывѣт кырыхэмужэтѣ,
 мэгк лыһк Павла Ивановна Конькова.
 сōнэсьт лї тыффкма ын я тѣме Мари
 Бойне ля куллма сōн я лыгкэ версия эххт сōн
 лывѣт: Modjás Katrin.
 Эвѣтэль мунн ля куллма Мари Бойне версия
 я маңуа мунн ля коаввнма вўййк Поавла
 версия, мї лййй кырыха кыджемьлоагк
 ыгесѣт
 Мунн мушта, мї мунн лййй чофта
 тыффкма сōн ынэнѣ. Мыннэ лывѣт лї
 гудэлъ йуук оалвант. Тэдта лї чофта
 вйгкѣенне култэллэм гуэйкэ.
 Я тэдта лййй лōссэ: рōбхушишэ
 лывѣтэгуэйм. Эвѣтэль мунн лышишэ чїлктэ
 кырыхэмуж шэрэсьт. Ныдтѣшэ Павла
 Ивановна лāвл сумьханна я вымьханна,
 тэннгуэйкэ мыннэ бэдтэ лййй коаввнэ
 лāвлмуж вымь, кырыхэмгуэйкэ сōн ын мун
 лāввла.
 Тэдта лййй чофта тыффкэм ноаһц я мунн
 лййе култэллмэнч я култэллмэнч,
 кїлчлэмэнѣ лыһкэ пэрьмуз сōн мōджесѣ
 ынэнѣ.
 Я тэдта лї чофта тыффкма мыннэ, мї
 Сāммь кїлэнѣ англискэ сāнѣ “voice” я
 “sound” лѣв сāмма. Таввял-сāмь кїллэсьт
 сыйй куһтэ лѣв “jietna”, ныдтѣшэ Кїллт
 Сāммь кїлэсьт тōнн цядкак “инн”.
 Тэннгуэйкэ, куэссѣ тōнн кулак пїуук ынэтѣ
 лїмьпэ лоаннѣт ынэтѣ, сыйй эѣ лышишэ
 “sounds”, ноа сыйй лѣв “voices”.
 Пукэсьт лї инн Сāммь ёмьнесѣт. Пук
 māht cārrнэ.
 Мунн юрта тэннгуэйкэ мунн чофта
 роаммишэда култэллэ ынэтѣ оалкэнѣ,
 вāресѣт, поакенѣ, яѣвр альн я ёгк альн. Я
 мунн ныдтѣшэ кїлчла лажьхэ сїнэтѣ мун
 суменѣ. Вāлльтэ, лоаннѣт ын лāвлэсьт
 “Кēсся” мун альбомэсьт “ын Луявѣрэсьт”,
 “voices of Lujávri”.
 Тамьне лѣв шйг ын, я тамьне лѣв ныдтѣшэ
 эѣ чофта шйг ын.
 Мунн шоабтша пїуук ын, ноа куэссѣ мунн
 кїлчла кырыхэ ынэтѣ оалкэнѣ, пїуук
 тоаррм кырыхэмуж. Тэдта шаннт гудэлъ
 шэрр, куэссѣ тэдта манн микрофона, я
 маңуа тэдта эля шйг.

but it's also the sound of the strong wind
 gust. The sounds are very important in Kildin
 Sámi language. In my life I tried to save the
 sounds of Kildin Sámi not only through the
 language but also with Lu'vvt.

Lu'vvt is the Kildin Sámi way of joiking
 and I remember that one day I heard old
 recordings of lu'vvt made by Pavla Ivanovna
 Konkova.

She had an amazing voice and even Mari
 Boine heard her and made a version of one of
 her lu'vvt: Modjás Katrin.

I first heard Mari Boine's version and then I
 found out the original version from Pavla
 Ivanovna, recorded in the
 1970s.

I remember that I was very amazed by her
 voice. For me lu'vvt is like
 the howl of the soul. It is
 very powerful to listen.

And it was difficult to work with the lu'vvt.
 First I just cleaned the recording from the
 background noise. But also Pavla
 Ivanovna sings without a stable
 metre and I had to find the beat
 to fit her sample in my
 recording.

It was a very interesting experience and
 I was listening and listening,
 trying to do my best with her
 beautiful voice.

And it is very interesting for me that in the
 Sámi languages the English words “voice”
 and “sound” are the same. In davvisámegiella
 they both are “jietna”, and in Kildin Sámi
 language you say “jiinn”.

For this reason, when you hear the sound of
 the wind or the sound of birds, they are not
 just “sounds”, but they are “voices”.

Everything in Sápmi has a voice. Everything
 can speak.

I think that this is why I very much enjoy
 listening to the sounds of nature.

And I also try to add them in
 my music. For example, the
 sounds of birds in the track
 “Geasset” of my album “Jienat lujávvrís”,
 “the voices of Lujávri”.

There are pleasant sounds and there are not so
 pleasant sounds.

I like the sound of the wind but when I try to
 record in the nature, the wind ruins the
 recording. It becomes like a noise when it
 goes in the microphone, and then it is
 not so pleasant.

Чофта шйг ынэ баяс, мэйт мунн ля
 кулма... мунн мушта, эххэтэшт мунн
 мэннэ урьтэтб мун пённгэнб Тайфунэнб.
 Мыйй выемь велосипед альн (мунн выа я
 Тайфун карэ мун луннб) кугкесь поаллкас
 альн, паяс урьтэтб, Луявэр сыйт луннб, я
 мыйй лёв коаввнма чофта тыффкэм пәжк.
 Тэдта ляйй цимә яввэр урьтэ кэскэсьт. Я
 уррьт ляйй гудэлъ стёни пырр явэр. Тамьне
 лийенб маньтэ-ляннч лоаньт, лй пйукха, лй
 нэмьха, лй эйй ённэ чүшикэ.
 куэссь мыйй лёв пуадтма, Тайфун элькэ
 угкэ (ciella) явэр гоаррэ. Сөнн элькэ гудэлъ
 “гав-гав”, я чйңүлээсьт шаннт ын
 “gggggaaaaaааааааввввв”. Сөн ынн элькэ
 коавкэнб явэрэ элясьт я манн урьтэ
 лоагкетб. ыннбямпа я ыннбямпа... ынн ойяр
 пугквесь лёв, мйн луннб я туммплэсьт
 мйнэнб.
 Тэдта ляйй ёллей реверберация я коавк,
 явэр я урьт кэскэсьт. Я мунн ныдтбшэ
 элькэ лаввлэ ын кйһчлэм гуэйкэ – я мунн
 кйһчлэннбтэ кырьхэ тэдта, ноа тэдта лй
 чофта лёсэ - кырьхэ тэйтэ ынэтб.
 Ама тэдта ляйй яррьенне! Мунн юрта, мй
 мунн нукуэссь эмм кулма мённ-не, кёххт
 тэнн.
 Лышиэ эфт вуэр, маңула, мунн лйе
 Кырркнёарк ланэсьт. Мунн ёсктэлле
 машинэть, чуэннчмэнб чүһкас альн,
 кйһчлэмэнб пёсэ мун пэррьтэ, мун ыннбне я
 мун пённгэ Луяврра я мунн лйе кугкесь
 тоннэлэсьт Кырркнёаркэсьт.
 Танна мунн эмм тёдтма, мй мыннэ ибе
 вәннбцэ тамьне, ноа мунн лйе тамьне,
 вәннбцмэнб пэррьтэ. Мунн элькэ лаввлэ я
 тэдта ляйй яррьенне ныдтбшэ. Лоагкэ вай
 күйтлоагкэ секундэдтэ коавк ляйй.
 Мунн кулле мун ын бмпи пырр мун я тэдта
 ляйй пэре шйг реверберация авта. Мунн
 юрта, мй тэдта эйй лй маль вуэй - лыһкэ
 тэдта виртуалэнб – тэдта ляйй ёллей
 ынн... Тэдта ляйй ялл.
 Тарьм тэдта лй эххт лёсстамуши
 лыгкэсьт - оаннэ коавк лыһкэм гуэйкэ
 ынэтб вйл элм-наллшэм сйн виртуальнэ
 саесьт.
 Ама мунн ля кулма ённэ тёдтэ, кёххт
 Самь блма бннэнб коавьнэть пырр йжесь
 лыһкэм гуэйкэ ынэтб ыннбямпа, вәллэть,
 кёххт сыйй сйррэв коавкэнб урьтэнб
 лймьпэ коавкэнб явэрэ элясьт – касьт эля
 электричскэ вйгктэмуж.
 Я пуэшьнэсьт – тённ вуаяк кйһчлэ тэдта
 ныдтбшэ – ынэсьт лй чофта мудта ын,

About very pleasant sounds
 that I listened, I remember one time
 I went to the mountains with my dog
 Typhoon. We rode the bicycle
 on a long trail up to the mountains
 near Lujávri until we found a
 very interesting place.
 It was a not so big lake in the middle of the
 mountains. And the mountain was like a wall
 around the lake. There were some birds, no
 wind, no waves, not so many mosquitoes.
 When we arrived, Typhoon started to bark
 (ciella) towards the lake. He started like “gaw-
 gaw”, and the sound became a deep
 “gaaaaaawwwwww”. His voice reverbs all
 over the lake to the top of the mountain.
 Louder and louder... sound reflections
 everywhere, near and far
 from us.
 It was a living reverberation and echo between
 the lake and the mountain. And I also
 started to sing to test the sound –
 and I tried to record it but it is
 very difficult to record those sounds.
 But it was incredible! I think
 I’ve never heard anything
 like that.
 Only one time later I was
 in Kirkenes. I was hitchhiking
 to my home, to my mom and
 my dog in Lujávri
 and I was in the
 long Kirkenes tunnel.
 At that time I didn’t know I could not
 walk there, but there I was, step by
 step walking home. I started singing
 and, there too, it was incredible too.
 10, 20 seconds of echoes.
 I heard my voice all around me and it was a
 perfect reverberation again. I think it is almost
 impossible to make it virtual –
 it was live sound...
 It was life.
 Today it is one of the hardest
 task to use reverbs to make
 sounds more natural in their virtual
 space.
 But I have heard a lot of information about
 how the Sámis use the properties of the
 environment for making the sounds louder, for
 example how they play with the echoes of the
 mountains or the mirrors of the lakes – where
 there is no electric amplification.
 And in the field – you can try it too – the
 voice has a very different sound then in the

мѣнн урьтѣнѣ: тамъне ѣвла йнн оййрѣтѣ. Я mountains. No reflections. And in the forest it
вѣресѣт тѣдта куллай мудта-налла. Я sounds another way. And on the water another
чоазе альн мудта-налла нѣдтѣшѣ. way too.
тѣдта лѣ пугк чофта тыффкма мыннѣ. This is all very interesting for me.

Kristine R. Eira

Da ii gávdno duodji mas ii lea jietna³²²

*Don jearrat jienaid birra, duojs ja jietna. Da
lea nu ahte go olmmoš coahkká ja goarru
eronamažid mun goarun goarrunmašiidna.
Das lea muhtumin, dahje ovdal, ovdalašáiggi
dalle go mun ledjen vehát nuorat dalle mus
lávehin mašiidna, mas lei hui stuorra jietna.
Hui diekkar rigearra ja dalle mun gal lávejin
atnit dego hørselsvernat nalde nugo ii bilis mu
gulu.*

*Ja go mun čoahkan ja goarun de mašiina jiena
manná.*

*Ain go olmmoš goarru eronamažit mun gii
guorrun olu holbbit, go mun goarun de mun
sáhttan guorrut vehá goarrunmašiidna boahdá
ja de fas boahdá vehá eambbo fártá leahtto-
mašiidnas, ja muhtumin goaron seaibut.*

*Go mun čoahkan ja guorrun ja gulan
guorranmašiidna jietna, de le munnje dego
terapia.*

*Mun in dárbbas vuolgit, jus mus lea juoga
maid mun váibbohuvvan dege leamašan hui
hušša dan beaivvi, de mun čoahkadan
mašiidna dogobealde, ja divttán jurddagiid
mannat mašiidna jietna mielde.*

*Ja mašiidna jietna lea diekkar ahte go olmmoš
liiko dan bargu maid barrggat, čoahkat
guorronmašiidna ovttabealde, da gal lea
dakkar ahte olmmuid jurdagiid dego ráhčet ja
rensket visot daid jurdagiid.*

*Olmmoš dego filosofere ovttaleske otná
beaivvin.*

*Ja mun gal láven lohkat ahte guorrun
mašiidna lea mu irgi, dieinna lave hui buorre,
don oaččut hupmat don oaččut čohkadit ja
jurddašit vaikko maid.*

*Ja guorrun mašiidna lea, mun in dieđe maid
mun áiggun lohkat...*

*Da lea stuora diekkar dego terapia ovtta
olbmui.*

*Ja de fas nuppe lahce go mun čohkadan ja
valddán dan giehtaduoji.*

*Ja giehtaduodji lea maid juoga maid mun
liikon hui bures, eronamažiid siste-duodji.*

*Mun čoahkan ja mun in liiko siste-duojiin
guorrut mašidniin.*

You asked about sounds, duodji and sound.

This reminds me of when someone is sitting and sewing, especially when I sew with a sewing-machine. It has sometimes... or at least before, when I was a bit younger, I used to have a machine that had a very loud sound. It made a lot of noise and because of that I used to wear hearing protections, so it would not damage my hearing.

And when I am sitting and sewing... I hear the machine sound going.

When people sew, especially me who sew a lot of holbbit... when I sew, I can sew a little with the sewing machine and then the sound comes a little more quickly with the *leahtto*-machine. And sometimes I sew *seaibut*.

And when I sit and sew, and I hear the sound of the sewing-machine... to me, it is like therapy.

I don't need to leave. If there is something that makes me fatigued or if it has been a very stressful day, I just sit behind the machine, and let the thoughts go with the sound of the machine.

And the thing with the sound of the machine is that when people like the work they do, sitting behind the sewing-machine, then it is as if all the struggling thoughts are cleared.

You kind of reflect upon the day you have had.

And I use to say that the sewing machine is like my boyfriend, that cares a lot for you, and you can sit and think, and talk about whatever.

And a sewing-machine is like... I don't know how to explain.

It is like a great therapy for a person.

And that is true also for when I sit and take on the hand duodji.

And hand duodji is also something I really like, especially leather duodji.

I sit... and I don't like to sew leather duodji with the machine.

³²² "You won't find duodji where there's no sound"

*Nu ahte mun guorun daid giedain, oaive-
 giedaiguin suotnjatárpunjalmmiin ja munnje
 lea maid de ahte dat guorrun dege dan
 duodjon, dat addá munnje nu olu.
 Mus lea alo jurdagat, mo mun dien dagan dal
 na.
 Mo son dien galggašin dahkat nu ahte šaddašii
 alkit?
 Mun goitge mun manan dien arbevierolaš
 mahttu mielde ja nu mo mun lean oahppan
 dudjot.
 Ovddamearkadihte guorrun gahffeseahkkat.
 De mun jurddašan “mo bat die livčče alkimus
 guorrut”?
 Muhto goitge mun valjen dien vuogi mielde
 maid mun lean oahppan, mannánvuodas.
 Ja mun in gal duodje gahffeseahkkat dan in
 sáhhtešit maskiinan guorrut.
 Dat ii leat munnje dan arbevierulaš duodji.
 Go mun dieđan ahte siste-duojiin mun galggan
 áimmiin ja suotnáruin guorrut.
 Seammalahčče lea guolggan-duodji.
 Ja ollu dat duojit ja moderniserenjuvvun ja
 stuorra mašiidnaiguin, dat leat dego
 veahkkegaskaoapmi
 Neaska ovdalmearkadihte gapmasat, de don
 manat mašinii neaskin,
 ja de ii leat dego dološáiggi go
 neaskaijahkkun.
 Ja das leat maid jietna, go jahkkun naeski.
 De don gulat ne “dong dong dong dong”.
 Ja hui fiinat ne, ja de olmmoš čoahkkat ja da
 lea dego dan olloslaš-terapia juohke dinga
 munnje goit, dan duojis.
 Ja mun jahkan olbmuiguin, diekkar olmmoš
 mii ii leat goassege duodjon, ja fuobmá dan
 ahte dan son gal liiko duođai duodjai.
 Ja de čoahkkat dan mašiidna ovttabealde ja
 gullá dan mašiin-jeatna go manná “drrrr”
 “drrrrrr”... Manná nie mašiidna.
 Ja da dego luoitá visut jurdagiid guorodis, dat
 čuovvu dušše dan mielde.
 Dat lea dego rávnnji mii manná, ja čuovvu ja
 čuovvu ja čuovvu.
 Nu ahte duodji lea iešguđetláganiid jietnat.
 Da lea mašiin-jietna...
 Dat lea vadjat/n-jietna...
 Dat lea neaskin-jietna...
 Dat lea suotnáru-jietna...
 Dat lea sistedikšun-jietna...
 Dat lea salten-jietna...
 Dat lea vuoiddas-jietna, go vuoiddan
 gapmasiid de ge sisti bijat ja vuoiddat.
 Nu ahte da leat ollu jietnat.*

So that I sew it with my hands and with the
 needle, and to me that kind of
 sewing and duodjing...
 it gives me a lot.
 I always have thoughts... how should I do this
 and that, and so on.
 How could I do this so it turns out
 easier?
 But still, I go with the traditional way...
 the one I have learned to
 duddjot.
 For example, I sew coffee bags.
 I then think “what’s a convenient way I can
 sew this?”
 But still, I chose to go with the way I have
 learned in my childhood.
 And I certainly don’t sew coffee bags with the
 machine.
 For me, that is not the traditional duodji.
 Because I know that with leather duodji I am
 going to use the needle at the tendon thread to
 sew. The same goes for fur duodji.
 And all these kinds of duodji that were
 modernized and that use big machines, those
 are like aiding tools.
 For example, to process the leather of
 gápmagat, you rely on the machine to do this
 work, and so it is not like in old days when
 one really performed the tanning process.
 And that also has a sound... when you tan the
 leather. You hear like “dong dong dong
 dong”. And it is so nice and soft, and then
 people sit and it is like a whole therapy, for
 me at least, through this duodji.
 And with people, I believe that people who
 have never done duodji before, well, they will
 realize that this is something they really like.
 And you sit behind the machine and hear the
 machine sound that goes like “drrr”,
 “drrrrrr”... It goes like that, the machine.
 And it is like as it lets all the thoughts out of
 your body, they just follow the sound.
 It is like a current which goes, and follows and
 follows and follows...
 So duodji has different kinds of sounds.
 There is the sound of machines...
 There is the sound of cutting...
 There is the sound of tanning...
 There is the sound of the needle...
 There is the sound of curing the leather...
 The sound of salt...
 There is the sound of smearing, when I smear
 the gápmasiid or rather the tanned leather.
 So, there are many sounds.

*Ja go gávtti olmmoš guorrut, dat leat jienat
 mot don bijat báddii bohtalagat.
 Dat leat jienat, iešguđelagan jienat.
 Maid mun áiggun lohkat... diekkar stohkosat
 mas don ii oaidne maid don barggat dege dan
 maid dien olmmoš barggat, ja da lea sáhka
 duoji birra.
 Mun gal jahkan ahte mun soaitášin jienas
 gullat, maid don olmmoš bargga.
 Soaitan, da ii lea sihkkar lean go mun alccan
 čatnan daid jietnaid nu bures muhto mun
 jahkan goit ahte jus olmmos ii oaidne maid de
 ja do bargga de mun jahkan gal ahte mun
 soaitášin diehtit.
 Nu ahte duojis, leat ollu jienat, vaikko olmmoš
 ii jurddaš dan.
 Da orru hui diekkar don dušše vajat, guorut,
 ordne suotnáru, ja don doaivut dan ahte
 danguin ii leat jietnat muhto duojis leat jietnat
 čađa gaskkas...
 Čađa gaskkas go barggat duojis de dus leat
 jietnat.
 Ovdalmearkkadihte, jus don na valddat, sisti
 galggat ruvvet nu ahte dimis šadda...
 Das lea maid jietna.
 Ja don ii dan jurddaš ahte, makkar jietna da
 lea, muhto da lea jietna.
 Juohke tin̄gas lea jietna.
 Ja jus don galggat fanahallat,
 das lea jietna.
 Dal mun doalan ain sisti, iežan gieđa siste.
 Ja juohke tin̄gas lea jietna.
 Juohke duojis lea jietna, iešguđelagan jietna.
 Ja dan maid mun duddjon buot eanemus, da
 leat dieđusge dat mašiinduodji.
 Ja da lea maid, das dieđusge lea eanemus
 jietna, muhto das lea maid dego seammálagan
 jietna.
 Dat jietna ii, da lea dego dan mašiidna mii
 manná.
 Don gulat da manná, ja bisana ja fas vuolgá.
 Bisana ja fas vuolgá.
 Don gulat ja don gulat go olmmoš rosse das ja
 ođđa báddi álga ja ođđa báddi.
 Nu juohke tin̄ga mas duodji lea, da lea jietna.
 Ja jus mun áiggušin ovdamearkkadihte rahkadit
 dal daid olluid, ordnet, das lea maid jietna,
 vaikko ollu lea hui dimis,
 das lea maid jietna.
 Dego na don gulat... bijan no de don gulat...
 das lea jietna, ollus.
 Nu iešguđetlagan duojiid leat jiena. Iešguđe
 doaibmaiguin.
 Mun namuhin daid jietnaid, dat ledje
 mašiinjietna, mmhh...*

And when someone sews a gákti, there are the
 sounds of putting bands next to each other.
 These are sounds, different kinds of sounds.
 What was I going to say... such as toys, that
 you don't see what you are working with or
 what another person is working with, and that
 is also how you deal with duodji.
 I certainly think that from the sound I hear I
 can guess what a person is doing.
 Maybe it is difficult to tell how I myself have
 connected to those sounds so well but, in any
 case, I believe that I could guess
 without seeing what you are
 working with.
 So, in duodji there are a lot of sounds,
 although people don't realize so.
 It seems a lot like you are just cutting, sewing,
 threading the needle, and you believe that by
 doing this there are no sounds... but in duodji
 the sounds are everywhere...
 In every aspect, when you work with duodji,
 you have sounds.
 Let's say, for example... if I were to rub this
 tanned leather that is quite soft...
 That has a sound too.
 And you don't think what kind of sound that
 is, but it is a sound.
 Everything has a sound [also read 'voice'].
 And if you are going to keep stretching, there
 is another sound.
 Now I'm holding tanned leather in my hand.
 And each thing has a sound.
 Every duodji has a sound, its own sound.
 And the one I work most with is of course the
 machine duodji.
 And it is also, of course, the one with more
 voice, but it does also have a repetitive
 sound.
 That sound, no? That is like a machine that
 goes on.
 You hear it going, and it stops, and then starts
 again. And it stops and starts again.
 You hear and hear when someone works on it,
 and a new band comes... and a new band...
 So, wherever duodji is, there is sound.
 And if I was now going to, for instance, make
 all of them, in order, there would be sounds,
 though many of them are very faint, there
 would be sound.
 Like if you hear... you stay still and hear...
 There is a sound... many.
 So different kinds of duodji have different
 sounds. With different ways of making them.
 I mentioned the sounds made by machines,
 mmhh...

*Ja mašiinjietna lea diekkar drrrrr ja de bisana.
 Drrr ja de bisana.
 Muhtumin da manná hui jođanit ja muhtimin
 drr, drr
 Muhto da lea ainna harjaneamis, dego mun
 lean harjanan čoahkkit mašiinovdabealde.
 Mun in darbbaš studeret gokko báddi manná.
 Mun láven lohkat ahte da lea dego jus lea
 vuodjingoarta válldan.
 Jus biilain máhtát vuoddjit luodda nalde, de
 don mahttat mašiinain maid vuodjit.
 Go báddi, don doalat njuolga ja don diedát
 ahte da áiggu leat luodda nalde.
 Ne lea mun dalle oahppan go lean oahppan
 guorrut.
 Muhto mun lean šaddan ieš oahppas guorrut.
 Go mu eadni ii lean diekkar gii mahtti
 oahppahit, mu duddjot.
 Nu ahte mun šadden ieš.
 Ja mus lei áhkku juste seammalagán... go mii
 láveime duojin álgit gápmagiin guorrut,
 de gal issoras mitalit ja mitalit ja mitalit
 “na don áiggut ja son láve no ja no
 ja no”.
 Ja muhtimin mun ain in ipmir maid son lohka
 ja de láve áhkku lohkat “buvtte deike dan duoji
 gal mun ieš guorun valmas”.
 No ahte die lea... nu ahte mun lean hui ollu
 duojis ferten ieš oahppat.
 Ovdamearkadihte holbbit guorrut, gávttit
 guorrut, da lea ieš ferten oahppan.
 Ja álo olmmoš ain oahppá, juohke beaivvi don
 oahppat.
 Ii oktage lea rieggadan oahppan-olmmožin.
 Ja mun lean hui giitevaš juohke aina olbmot
 gii lea mu nevvon, ja gii munnje lea attan,
 muhtimin lohkat “son láve nie dahkat”.
 De lea mun dego ovdamearkadihte, mo sii láve
 lohkat “suoladan” dan oahppu attasan.
 Ja mun lean hui giitevaš go nevvogiin lean
 oaččun iešguđelagan nevvagiid daid jagiid
 mielde go mun lean duodjon.
 Ja sihke go mun riessan liidnid, liitnit leat
 maid okta tiŋga.
 Don giesat [giessat is also buzzing, the sound
 of spinning], válldat báhpira nu ja giesat ja
 čugget ja čuolbmat.
 Nu ahte juohke aina dan duojis lea jiena.
 Da ii gávdno duodji mas ii lea jietna.
 Nu ahte mii doaivut ahte jietna lea dušše da
 maid gullá dego bieggá, ahte jietna lea dušše
 mearra-bárut, musihkka, iešguđelagán diekkar
 čuoihhus da ga čuoiasat.
 Mii doaivut dat leat jienaid.
 Muhto jietna lea juohke tiŋgas.*

And the sound of the machine is like “drrrrr”,
 and it stops... “Drrr”, and it stops.
 Sometimes it goes very fast and sometimes
 “drr, drr”.
 But it is like an exercise, like I am training by
 sitting behind the machine. I don’t need to
 concentrate on were the band goes.
 I often say that it is like taking the driver’s
 license.
 If you can learn to drive a car on the road,
 then you can also drive with the machine.
 Because the band... you hold it straight and
 you know that it is going to be on the road.
 At least that’s how I have learned to sew.
 But I came to learn how to sew by
 myself.
 Because my mom wasn’t someone who could
 teach me to duodji.
 So I had to do it myself.
 And my grandmother was just alike... when
 we used to duodji starting with sewing shoes,
 it was certain she was inesorably going to
 repeat, “So, you do like this, and it goes like
 that, ja nu, ja nu”.
 And sometimes I didn’t understand what she
 was saying and then grandma used to say, “ass
 me the duodji, I can finish sewing it myself”.
 So that’s how it was... I’ve had to learn a lot
 by myself with duodji.
 For example, sewing holbbit, sewing gávttit,
 this is something I have learned by myself.
 And a person always learns, every day you
 learn something.
 Nobody is born knowing everything.
 And I am so grateful to every single person
 who has given me advice and who has
 sometime said to me “it is usually done like
 this”. Then I have in a way I have – like they
 use to say – “stolen” that teaching little by
 little. And I am so grateful that the advice has
 come from different mentors with the years
 that have passed while I have been duodjing.
 And also, when I fringe the liidni... scarfs are
 also something.
 You spin the threads, you disclose the sheet
 like this and fold it and you stick it
 and tie it.
 So, everything in duodji has a sound.
 You won’t find duodji where there is no
 sound. So that we believe that the sound is just
 what we commonly hear, like the wind, or just
 that of the ocean waves... music, and different
 kinds of musical sounds.
 We believe those are sounds.
 But the sound is in everything.

<i>Nugo mun lean čeahkkan dás, bijan giedaid nu (spežžet), da lea jietna.</i>	Now I am sitting here, I put my hands like this [claps]... that is sound.
<i>Juohke tiŋgas lea jiena, go olmmoš jurddaša.</i>	In everything there is sound... when you think. Like, no? Like I have been sewing here.
<i>Dego na, dego mun lean guorron dan das.</i>	It is such a small purse, and it also has a sound... of different kinds.
<i>Da lea diekkar unna buršasa, das lea maid jietna... iešguđeláhke.</i>	When I sew earlier, you saw when I was fixing the interior part of the purse that I have sewed.
<i>Go mun guorrun, eske oidnet go mun guorrun dakkár siskkáldas áđat mii galggá veaskui, maid mun lean guorrun.</i>	...And, like that, I have also made a sound. Different kinds of sounds.
<i>Ja dieidda lea maid rahkadan diekkara ja da lea jietna, da lea iešguđelagan jienat.</i>	

Mathis Eira

Olmmoš haliidá gávdnot oadjebasvuohta juohke dinga mas gullá³²³

*Mun jahkán ahte jus mun dál muitalan ahte
aistton dalle go mun alggus riegadin, ahte
ovtta daid vuosstaš dingaid maid mun gullen,
dat lei dieđusge eadni go son juoigii ja ainna
da lei dan maid mun gullen olu.
Eadni ainna juigii hui olu go mun ledjen
riegadan dahje mannávuodas ja dasa lassin
maiddái Duvva kasehttaid guldalan
luđiid ja nie.
Nu mun jahkán da leat guldalit lagás olbmot,
eronamašit juoigat, mun jahkán da lea dego
vuosstaš dinga maid mun muittán, ja dego
ovttaláhke hábmen nugo mun olbmožiin ja
maiddái hábmen mo mu eallin šaddai go
dieđusge mun lean juoigin ja juoigan olu.
Ja mun jáhkan ahte go don leat guldalan eatni
lávllut ja juigat, mun jáhkan dat lea leamašan
hápmen mo mun lean olmmoš.
Ja de lea dieđusge bajašadden boazudillis, nu
mun jáhkan ahte bohccujienat leat maiddái
leamašan hui olu hápmen mo mu eallin, ja
maiddái jus gávdnot, diekkár áisston go
guldán dál bohccujietnait, iežat biellut dahje
ruovggame.
Da leat aistton diekkár dovddu ahte don leat
ruovttus.
Ahte don leat dego hui oadjebas doppe just
dien dilis go gulán daid bohccujieanaid.
Ja seamma maiddái luđiin dieđusge.
Olmmoš dovddá oba oadjebas go guldalá
luđit, da lea aistton, dat leat nu olu dovddut
čatnaset dasa.
Ja dieđusge jus mun dál namuhan amasjienat,
go daid guldalan, daid ain olmmoš dieđusge
gullá olu.
Eronamašit dál ođđa áiggis.
Olmmoš guldalá olu iešguđelágan
jienaiid; biila, scooter, ruvket, mii leašge.
Dain olmmoš ainna ovttomanas čatnasit.
Makkár dovdduid olmmoš oačču dán jienas?
Ovdamearkka, dihte dus dál lea dakkar miesta
dán hui unohas jietna, juoga mielde mat muitá
dahje dovddá, de olmmoš oačču
dieđusge diekkár heittot dovdduid
dán jietnain.*

I think back to when I was born, one of the first things I remember hearing is certainly my mother joiking.

At least, that is something

I heard a lot.

And my mother used to joik very often when I was born and throughout my childhood.

In addition, I also grew up listening to luodit from Duvva cassettes, and so on...

So, I believe that listening to my closest people – especially their joiking – I believe it is one of my earliest memories... One that, in a way, shaped me as a person and influenced the path my life has taken. And that is, of course, why today I am a juoigi and why I joik frequently. And I believe that when you grow up listening to your mom singing and joiking, it profoundly shapes you as a human being – this is what I think. And, of course, I grew up in a reindeer-herding environment. So, I think that the sounds of reindeer have also defined my life a lot. And when I now listen to the sounds reindeer make – their bells or the grunting.

It is the feeling that you experience you're home.

You feel very safe there, in that precise situation when you hear the sound of reindeer. And that can be said also for luodit. People feel remarkably safe when they listen to luodit. And that is because there are so many feelings linked to it.

And if I now mention less familiar sounds, there is certainly a lot to listen to.

Especially now in modern times, people hear a lot of different sounds: the car, the scooter, mining, anything...

And these are all sounds to which people relate to. What kind of feelings do people get from these sounds? For example, if you have such an extremely unpleasant sound associated with something that you remember or feel, of course when you hear that sound you'll get the bad feelings associated with it.

³²³ "People want to find safety in what they hear"

Ja de bohte diedusge oba jienat maid leat aistton suohtes jienat, dego dakkar vuogas jieanat ja olmmoš ain diedusge čatnasá buoriid dovddu dasa jienat ja geahččalin ohccat ruovttuloahtta dieid jienaide. Seamma go manaivuodas, muitalan ohccat ruovttuluohtta deidda luđiide ja bohccuide ja nie.

Ja olmmoš maiddái ođđaaigge guldala musihkka ja gávdna musihkka masa lihkku ja olmmoš hálidat guldalit daid go olmmoš lihkku dasá.

Ja boahtha fas ruovttoluohtta daid jienaid masa eai lihkku ja go lea gullon daid oktii ja oaččun diekkár heaittu duovdduid das.

Ja de ii hále, de geahččalit dego aistton gárvit daid jienaid.

Olmmoš de gárvodit ja geahččá dušše ohccat jienaid maid addet buoriid. Olmmoš haliidá gávdnot dego oadjebasvuohta juohke dinga mas gullá dego. Dego oahpesolbmot-jienaid, dat addet oadjebasvuohta. Ja iežan olbmoš jietnat, bearašša.

Ja diedusge mu oktavuodas gal leat daid guokte jietna; eatni dahje luohiti dahje eatni go juoigá ja maiddái bohccut-jieanat, go lean bajašadden bohccuidguin ja mun dovddan ahte mun oaččun diekkár dovddu dego ahte mun lean ruovttus. Da leat goit dan maid mun dovddan. Mun jáhkan da leat aistton, jus mun dajan dál ahte mun ii beasse goassege gullat bohccuidjietnat, mun jáhkan ahte de gahče olu oadjebasvuohtá ja dat dovddu ahte don leat ruovttus, da gahče hui olu eret.

Dat lea aistton dan maid olmmoš dovdda, da leat aistton dan maid olmmoš háliida guldalit.

Ja seamma easkka luđiin, go ainna ieš juoigamin dahje guldalit earaide luđiin.

Olmmoš oačču aistton dán dovddu ahte lea oadjebasvuohta, da leat ruoktu ja da leat aistton dan man ohcalat dego dan bađe go eará jietnat mat dego, dat eai leat nu vuohkasi gullat dege addá dege hui unohas det olmmoš garvanit deidda diedusge nu ahte.

Nu ahte mun jáhkan ahte da leat aistton vuos makkar jienaide, makkár oktavuohtha don čanat dan jiena maid mun jurdašan nu ahte, da lea muhtun jienaid mat muhtimiidda leat hui dehalaš ja muhtimiidda leat eará jienaid mat leat hui dehalaččat.

Ovdamearkka dihte muhtin liiko scooterjienaid ainna daid liikojit scooteriin, ja ainna daid čatnet dasa buori oktavuohtha. Nu ahte da leat diedusge duovdduid maid leat hui olu čatnun deidda jienaide.

And then, of course, there come sounds which are rather... pleasant and comfortable. And people certainly link good feelings to those sounds and try to get back to them, To those sounds.

Similarly, in my childhood, I remember finding home in the sound of joiking and reindeer, and so.

People nowadays listen also to music. They find the music they like, and they want to listen to what they like.

And then the sounds people don't like can also come back. Sounds you have heard once, when they transmitted bad feelings.

And in that case you don't want them, and you try to get rid of those sounds.

People seek just the sounds that transmit good feelings to them. People want to find, like, safety in everything they hear.

Like the sounds of familiar people, they bring safety... The sounds of your own people, your family.

And, again, in my case I feel certainly connected with two sounds: these are the sound of my mother when she joiks and the sounds of reindeer. Because I grew up with reindeers and when I hear them... I get the feeling of being home. At least, this is what I feel. I believe that if I now say that I will never hear reindeer-sounds again, much of that feeling of safeness would fade away...

I wouldn't feel home anymore.

What people feels connected to... that is what they want to listen.

The same can be said for luodit. When I myself joik or when I listen to others' luodit. You get the feeling you are safe, that you are home, that this is what you are looking for.

While for other sounds, like those that are not so good to hear, that are very unpleasant, people avoid them.

So that...

...So that I believe it depends on what kind of sounds, what kind of relationship you create with the sound. There are some sounds that matter more to some people and other sounds that are more important to others.

For example... Some people like snowmobiles. They enjoy the sound of snowmobiles because they weave good relations with the scooter. So that those are feelings that are very much connected with the sounds.

*Ja munnje leat diedusge luohiti ja
bohccuidjienaid, dat mun jahkan leat dat mat
munnje aistton, da leat aistton munnje hui
vuohkasi boahte dege ahte mun oaččun daid
duovdduid ahte leat oadjebas ja mun dovddun
aistton daid dego ruovttus.
Mun jahkan dat leat aistton maid mun
jurddašan.*

And for me, of course, joiking and
reindeer sounds are, I believe, those sounds
that make me feel more
comfortable, and
that make me feel very safe...
...and that make me feel at home.
So, I believe this is what I
think.

Ellen-Johanne Kvalsvik

Soundscapes are very personal.
They are part of caring and connecting to everything

In the background, we can hear the kittiwakes and the big seagulls
And that's birds that I remember from my homeplace, where I grew up, on an island, a bit out in
the sea where the seascape is dominating, with the sounds of the ocean, sounds of different birds,
seabirds...

The sound of the people moving, mostly by foot, not so many technical sounds, apart from boats,
smaller boats and vessels; especially these old wooden boats that have a particular sound –
because they had this *totaksmotor*, that is an engine going like: “dun dun dun dun dun dun dun
dung”

That is very typical for the older wooden vessels from the coast.
When the fishermen went out at 5 o'clock in the morning, I remember waking up to that and then I
could sleep one hour before I myself had to go out and feed the animals.

And then coming out, especially the horse – when I open the door behind my house – he could
hear that we were going out so we had this neigh like: “MMMMMMmmh”

That was like: “Welcome, it's morning”

And then the chewing of hay from both him and the sheeps that were
walking around the farm...

So this was the fishing-farming environment that I grew up in.
And the most soothing sound that I know, when you walk out along the shore it is when you walk
on the stones and the stones hit each other, they connect in this
very soft rumbling sound

And then, when it's nice weather, the sea gently just pushes towards the shore and it's a little bit
like a small river and at the same time it's affected by the seaweed that kind of rustle with the
leaves.

And, of course, you have the smell of the ocean. When you have lived out there for long you don't
notice these smells that much, but if you go away and come back then you notice these smells.
It's the same here in Alta, when I have been out on the island for a few days and then come back,
especially this part of the year, I smell that farmers have spread the dirt from the cows out in the
fields – I can smell that.

Also the pine has a very strong smell, especially yesterday when it was raining. Mh.
It's also the smell of the moist, of the sand, because the land there is very sandy – it's typical pine
forest there, with also these needles from the pines when they start to decay has this very special
smell.

Outside, in the sea, there could be the seaweed when it's lifted up on the shore and it lays there in
the sun and decaying it smells... Can smell very strongly.

So that's all part of the sensations of the seascape. And it's very blue: everything is blue.
The grass that goes all the way up to the mountain hills, that's very intensely light green, but when
it comes here to Alta and the soil is orange, then it's dark green.

So it's different colors from the sea and the islands to this semi-inland – it's not particularly
inland, but it's semi: it's by the sea, but at the same time not like the outer part of the sea.

And then this is a town where you have all these technical sounds, both outside and inside.
It's the sound of workplaces, with all these ventilation sounds, and people working, people
talking... All the cars.

Living next to the main road, of course I have the cars all the time.

My husband that was brought up in the town he does not notice the cars at all, so... eh... It is
something that I have to get used to.

When I am back at the island I know the sound of most of the cars that are there, so I don't have to
go to the window to see who is driving by and who isn't driving by.

But I cannot do that here, because there are thousands of cars moving.

So, I think that it's something when you come from the part of the country where knowing sounds is part of... You cannot say this days that it is part of survival, but I think it is part of connecting to everything:

You need the sound to connect, to show that you care.

When you stop noticing the sounds, you lose a lot of information that are available around you, in the environment.

I know that from living in larger cities, that after a while you get a bit numb to the soundscape.

It's all this noise, like a big river.

I can kind of relate to that in a way.

Because I get very tired of these sounds...

So to me they are noise... Noisy.

But then I realize that to other people it is comforting to have those sounds around them, because it is something they are used to.

The soundscape for people are probably very personal

It's how we learn to use the sensory system and what we sort out as being important and what we sort out not being important.

And then of course if one is tired some things can become very annoying, take out of concentration, in a way.

So, that is how I see the different soundscapes and the things attached to those soundscapes.

So that is the difference between Sørøya and Alta.

So, it's probably also then related to every place or every landscape.

Yeah, I think some think that noise of boats are annoying, if they are not used to it.

It's probably attached to me being a small girl in the fishing village, and knowing that when I hear this sound – all the boats going out in the morning and also when they come back – people are safe, when they come back.

And this is the sound of people coming back.

A friend of mine, that has been living in big cities all over the world, he tried to drive by car from Alta to Oulu and there is absolutely – oh, we cannot say nothing – but to him there was nothing in between, along this road.

He got really scared because it was so silent, and it was winter, it was dark, and there were no sounds.

So by not having these familiar sounds around him, he got very scared. That was a very anxious place to be in.

He described that it is horrible being without sounds of other people – in the comfort of other people.

It is probably when you are used to having people around you that you think will look after you, and help you if you need help.

It is unpleasant to be where you need to take care of yourself: you need to have those skills to be able to take care of yourself.

Ingør Ántte Áilu Gaup (Ailloš)

Go buot ii sáhte sátniguin dadját de heive juoiggadit³²⁴

<i>Dat gal lea somá ahte olbmut háliidat gullat min luodit ja diehtit, mii dat lea. Na dán áiggi lea luohiti, diedusge gullo olu viidis máilmmiin, tv ja radio bokte, filmmain ja nu on. Ja mángasat háliidat geahččalit juoigastit. Na juoigan lea min musihkka-giella, go buot ii sáhte sátniguin dadját de heive juoiggadit. Juoigan lea duovdduid giella, ainna go daid dovdduid čilge álo ii lea nu álki no movt de gievvá? Olbmot dáhket symfonijjat ja olbmot dahke jági mielde stuorra komposišuvnat dálvet, geasi, giđđa ja olmmoš sáhte juogat iežas duovdduid. Na mii han dáhpahuvvá go don juoigat?, láve jearrat. Mo don oaččut dán jiena (álga juoigat) De leat. Mus ii leat sánit dasá. Don fertet ieš geahččalit. Da lea dego oahppat giela. Jus mun daján dutnje Nicola, jus don galggat oahppat sámegiela, don han oahppat sámegiella ja dajat cizážat (Nicola geahččala dadjat sáni). Diedusge don gulat ja áđastallat nu bures go sáhttat, seammalaččat go oahppat ođđa giela. Nie oahppá luodit, juo, juste nie fal. Don guldalát dárkilit, ja de geahččalat oaččut seammá jiena go dan maid dan juoigii, mot dán juoigá. Mun gulán du giela, muhto don hupmát italiagiela, mun ádestallan ja nie mun oahppan. Da leat goit dat vuodđu mo dološáigi leat oahppán ludiit. Guldalit nu bures go sáhttat ja dárkilit ja de ádestallat ja de gal oahppan nu bures go sáhttan ja iežas málliin juoigadit. Ainna da ii leat mihkkege lassiguin da áigut leat, dahje aibbas seamma vokálat, da leat du ižas vuogiin mot don ivnnet du jiena. Nu juoigamin sáhtta muitit olbmuid ja diedusge go nubbi juoigá hui davjá lea na juoiga mitalit bures, ovdanbuktit du oahpasa. Luđiin davjá gudneahhta nubbi olbmot.</i>	It is nice that people want to hear our luodit and knowledge, what it is. These days you can certainly hear luohiti all around the world, in the tv and through radio, in movies and so on. And a lot of people want to try to joik. Juoigan is our music-language, and when not everything can be explained through words it suits better to joik. Juoigan is the language of feelings, because when explaining the feelings, isn't always so easy, what do you do? People made symphonies and people make great compositions over the years in winter, summer, spring and so they can express their own feelings. So, what really happens when you joik? People often ask. How do you get those sounds? (starts to yoik) That's it. I don't have words for that. You have to try it yourself. It's like learning a language. If I tell you Nicola, if you are going to learn the Sámi language, you learn Sámi and say, "small birds" (Nicola tries to say the word). Of course, you listen, and you try to imitate the best you can, just like when you learn a new language. That's how you learn luodit, just like that. You listen carefully, and then you try to get the same sound as the juoigi. I hear your language, but you speak Italian, so I imitate and that's how I learn. That's at least the way they learned luodit in the olden days. Listen the best you can carefully and imitate and then you learn it as good as possible and joik it in your own way. You see, there isn't much else to be done with it, or just the same vowels, it's up to you how you color your voice. That's how through joiking you can describe people and of course when someone else is joiking often a luohiti is good at telling, presents what you learned. Luodit often honors another person.

³²⁴ "When not everything can be explained through words it suits better to yoik"

*Ja sahtttá bidjat dajahusat dastan go juoigada
 muhto da leat maiddá dajahusat manja luđiin
 maid leat juo, go gullen dan luohai dahje dán
 báiki luohai.*
*Na luđiin gal sáhtte áđastallat maid lottiid
 nugo go gullon muhtin juoiga Per Hætta
 daidda juoigin, dat ii leat šet eallimin.
 Lottiid, havella lea varrá dárogillii.
 (boagusta ja algá juoigat).
 Dan vehá áđastallat dán lotti.
 Ja garjasa luohi (juoiga gárja).
 Dan áđastallat vehá gárja ja de bidjet dasa da
 dieidda luodide dan vuodus.
 Ja gumpes lea maid luohi.
 Moadde luodid goit (juoigá gumpe). Ja mun
 juoiggan dan gumpe.
 Ii mun juoike gumpe birra.
 Nu go dadjet “lávllut du birra”.
 Ainna go musihkka ja luohi, maid leat
 duovdduidd giela.
 Jus mun daján mu eamidii, “mu ráhkistan du
 birra”... ii ne gal heive dadjat.
 “Mun ráhkistan du”.
 Go luohi lea duovdduid giella, de lea
 luonddulaš dadjat njuolgga “mun juoiggan
 du”.
 Mun liikon fiertui (?), mun liikon
 olmmoslašvuohtii, da manná njuolga, ii das
 leat mánga birrasa.
 Da manná váimmus váibmui, oaččut dadjat
 nie.
 Mun juoigan du.
 Ja doložis maid ovdalažas daddjen davjá “iige
 luodis lea álggu iige loahppa”.
 Ja boaris luđiin hui davjá, ii gávdno aibbas
 čiealga loahppa nugo (juoigá) lállegiin sáhtet
 leat. Luohi manná birra.
 Dego bissaná fahkkestaga,
 vuordde-geahtta.
 Muhto go mángas juoiget ovtas, eai han
 boahkaid vuoigna ja bissehan seammá áiggi.
 Nu ahte luohi manná ja jorburahke dego
 luonddu johttu lea ge árvečazi manná birra
 birra ja nie ja.
 Ja olbmot eallin leat maid nu, mii bohtet ja
 manne ja ođđasta bohtet ja boarrasat
 jávket.
 Ja olbmot luohi dat lea musihkka nammá.
 Movt du olles nammá lea? Nicola Renzi?
 Renzu? Renzi. Ja nu.
 Dat ii ábo leat Renzu, dat lea Renzi. Renzi?
 Nie fal nie, seammá lea luđiin maid.
 Jus mu luohi lea dušše oassi dás (algá
 juoigat).*

And you can add short dajahusat when you
 joik, but there are also dajahusat existing
 already in many luodit, when you hear the
 luohi or that luohi came from the place.
 With luohi you can also present birds like you
 can hear in some joiking of Per Hætta, who is
 no longer alive.
 Birds, havella [the long-tailed duck] (*Clangula
 hyemalis*) is in Norwegian (starts joiking).
 It imitates the birds a little.
 And the crow luohi (starts joking the crow).
 It imitates the crow a little and then you put it
 in the luohi that way.
 And the wolf also has a luohi.
 A couple of luodit at least (joiks the wolf).
 And I joik the wolf.
 I don't joik about the wolf.
 People say they “sing about someone”.
 And luohi is music, but it is also the language
 of feelings.
 If I say to my wife, “I love about you”... It
 doesn't really mean anything when said that
 way. “I love you”.
 Since luohi is the language of feelings, it is
 natural to say directly “I joik
 you”.
 I like transparency, I like a human
 relationship. It is immediate.
 It doesn't go around. It goes
 from heart to
 heart.
 I joik you.
 And since the old days we say often that
 “luohi has neither beginning nor end”.
 And in old luodit often you don't find a clear
 end like (joiks with a cadence) you can find in
 songs. A luohi goes around. Like, it finishes
 suddenly, without expecting it.
 But when many people joik together, not
 everyone can breathe and stop at the same
 time.
 So that luohi goes and circles like nature
 flows, like the rainwater moving through
 different stages, around and around and so on.
 And peoples' lives are the same, we come, and
 we go and new people come and old people
 disappear.
 And a personal luohi is a music-name.
 What is your full name? Nicola Renzi?
 Renzu? Renzi? Exactly.
 You can't be Renzu, it is Renzi. Renzi?
 Yeah, and it is the same with luohi.
 If my luohi is – just a part here –
 (joiks).

*Dien áiggut oahppat seammalaččet, seammá
dárkilit, go mun oahppen dadjat du namá,
Nicola Renzi.*

*Da lea mu iežan duovddu, mu identithehta.
Mu luohiti lea nie, dat ii abu boahtit nie (álggá
juigat fas earálágan).*

Ii dat lea mun. Da ii lea mun.

*Ja jus mun maid juoigán du luohi vehás
unuhasat... Jus mun daján du namá unuhasat,*

*Nicola Runzi, “dovddá go don Nicola
Runzi?”, de ii lea buorre olmmoš de. De lea
badjelgeahččemin du, dahje bilkideamin du.
Juo luohi sáhtá bilkidit maid. Juo ja juohke
dijka mas lea ollu fábmui mearkkaša olbmui
olu, dovdduide. Dat sáhtá mánja láhke dego
ovddabuktat rámpomin nugo dábalaš nugo
dadjen, olbmot juoigat ja luoktat, bajideamin
nubbi olbmui maid, sáhtá
maid badjelgeahčče vuogin juoigat ja
bilkideamin.*

Ja da ii lea gal dieđusge olbmolaš.

You are going to learn this the same way, the same exact way, as I learned to say your name, Nicola Renzi.

It is my own feeling, my identity.

My luohiti is like that, and it doesn't come like this (starts joiking differently).

That is not me. It isn't me.

And if I also joik your luohiti a little inappropriately... if I say your name a little inappropriately, Nicola Runzi. “Do you know Nicola Runzi?”, then I am not a good man.

I am underestimating you, or making a fool of you. Yes, with luohiti you can also mock.

Yes, everything that has a lot of power means a lot to people, emotionally.

It can be expressed in many ways, to boast someone as usual, as I said, like I talked about earlier, people joik and praise the other person, but you can also in a way degrade someone and make a fool out of them.

And of course, it is not very human to do so.

Ida Emilie Lindseth Marakatt

ATV:s ja risku lea guokte iešgudet jietnaid mais gullo sápmái³²⁵

*Bajášadden máddin, stuorra gávpogis.
Dieđusge de leat muhtin jietanid, ja muhtin
vásáhusaid ja oaččut lohkat aistton
aktivitehtaid maid doppe ii leat nu dávjá
gullat, iige oadnit iige vásihit.
Ja de go mun ledjen unni, mii láveime juohke
jahki, juohke geasset, mannat davás.
Ja eronamašit doppe gos mu áhkku orru,
doppe ruotta beallis.
Mii manaime dohko juohke geasset ja muhtin
dálvet máiddái Ja dieđusge dat han ii lean
dego dánáiggis, gos sáhttet mobiilain čoahkkat
olles beaivvi ja iPadin speallat, ja leat
šearmas olles áiggi.
Mun muittán ahte mis láveime muhtin háve, ii
láiddis, muhto mun muittán ahte dat mii lei
buot suohtáseamos, lei go áddjá váldii min
mielde skooterin vuodjit dahje ATV.
Ja mun muittán ahte ovttatmano go son dego
álggehii dán motora, ahte de mun dihten
ovttatmano ahte “okei, dál mii leat jođus. Dál
mii áiggut vuodjit”.
Ja ii dat dárppašit leat nu guhká, soaitii
muhtumin leat dušše vihtta, logi minuhttat,
dahje kvarta, bealle diibmu, ii dat lei nu guhki
álo muhto mun dušše muittán ahte mun láven
álo boahit, mun vihken ovttatmano su
lusa go son lei jođus gostege deinna.
Ja de láven álo jearrat jus mun sáhten mielde
ja mus leat máiddái ovttatmano dego viellja ja son
maid lávii jearrat; oačču go son maid mielde?
Mii láveime de buot guolbmasat čoahkkat
skooteris.
Ja mun muittán máiddái ahte mu oambealle
dahje vilbealle oažžui su váhnemiin ovttatmano
diekkar unná ATV:a, nu ahte mii láveime
máiddái mini-ATV:n vuodjit ja dat lei hui
somá go mii beassaime ieš stivrret ja leat
aisston vuodjji.
Muhto dánáiggis da lea ain seammá somá, ja
dat soaitá leat dán dihte go mun, nugo mun
dadjen, mun lean bajášadden máddin, nu ahte
mun in láve nu dávjá vuodjit ATV:a, seammá
go eará boazusápmelaččaid.*

I grew up in the south, in a big city.
Of course there are some sounds, and some
experiences and if you can say activities
which are not so often to neither hear,
see or experience.
And when I was young, every summer of
every year, we used to go to the North.
And especially to the place where my
grandmother lives, in the Swedish side.
We went there every summer, and some
winters too. And of course, it was like it is
today, where you can sit on your phone the
whole day and play with your iPad and be in
front of a screen the whole time.
I remember that we sometimes were, not
bored, but I remember that the most fun time
was when áddjá used to take us with him
driving the scooter or the ATV.
And I remember that the moment he started
the engine, I instantly knew “okey,
now we are on our way. Now
we are going to drive”.
And it didn’t have to be for a long ride,
sometimes it was just for five, ten minutes, or
a quarter, half an hour, it wasn’t always a long
ride, but I just remember that I always used to
come running directly to him when he was on
his way somewhere with it.
And I always used to ask if I could come with
him, and I also had like brother who would
ask if he too could join.
The three of us would then sit on the
scooter.
And I also remember my cousin who got like
a mini-ATV from his parents,
so we would also drive with the mini-ATV
and that was so much fun when
we had the control and could be
the driver.
But these days it is still fun, and it can be
because I, like I said, didn’t grow up
in the south, so I don’t
drive so often the ATV,
like other reindeer herders.

³²⁵ “ATVs and risku are two different sounds that belong to Sápmi”

Muhto mu mielas dat lea ain liiká somá, ja go mun gulán dán áiggis dien, aistton go motora álggá, dat addá hui ollu muituid munnje ja hui olu vásahusaide maid bohtet ruovttoluotta; eronamaš dál go mu áddjá lea jápman.

Ja maiddái dan hádja masa dan addá. Dat ii lea dušše jietna, muhto maiddái dien bensinhádja maid mu mielas... Dat addá munnje diekkar fiinat muittuid oaivái muhto mun diedán muhtumiida geat várra livččet dadjan dat ii leat nu buorre.

Mun muittán de go mii láveime sunnja vuodjit. Ja dat bohtá fas ruovttoluotta.

Ja dat lea somá dego dál go mun ledjen miessemearkkumis, mii vujiime skootera dohko ja dat adjaná meastta guokte diibmu ovttá guvlui, ovttá mátki, ja mun nu návddašin juohke sekunda, juohke minuhtta, vaikko lea lossat maid muhtumin čoahkkat ATV:s muhto mun gal livččen sáhttit vaikko man guhkká, mun in livččen ágibeaivvis darbbášan aistton mannat eret dien ATV:s.

Dat lea mu mielas ovttá daid buot somáseamos dinga maid sáhttet hommet.

Muhto mun diedán maiddái ahte dat ii leat várra nu buorre lunddui, jus jurddašan lunddui ektui ja eronamaš jus don it geavat dat barggus dego boazusápmelaččaide han lea dego reaidu dege juoga maid sii dárbbášat sin doalus dahje gos sii barget.

Ja mun jurdaašan dan birra maid ahte dat ii lea nu buorre ahte mun dušše somá dihte vuoján.

Muhto de lea seammá áiggis addá hui ollu muittuid ruovttoluotta ja dat lea juoga maid mun lean álo lihkkon maid mun ja mu "viellja", moai letne álo liikon motora ja maiddái skooterat maiddái dálvet.

Ja maiddái aistton dan hádja masa dan addá. Nu ahte dat ii lea dušše jietna, muhto maiddái dan hádja, dien bensinhádja maid mu mielas...

mun in dieđe muhto dat addá munnje diekkar fiinat muittuid oaivái muhto mun diedán muhtumiida geat várra livččet dadjan dat ii leat nu buorre dušše somá dihte vuodjit muhto mun in daga dán nu dávja nu ahte in jáhke dat daga maidege, muhto juo... dat lea goitge ovttá jietna mii mearkkaša oba olu munnje, da leat dan ATV-jietna. Mun dovddan diekkar fridjavuohta go mun vuoján.

Mun diedán goitge ahte mun lean jođus, mun in dieđe gos muhto mun vuoján, ja da lea dego mun guođan visot, daid heittot jurddagat dahje daid váttis jurdagat, dat lea nu fridjavuohtá vuoddjit, mun in dieđe, dat ii sáhte áibbas

But in my opinion, it is as fun, and when I now hear the sound that the engine makes as it starts, it brings back so many memories to me and many experiences come mind; especially after áddjá passed.

Oh, and the smell they give.

It is not just the sound, but the smell of the fuel too, in my opinion... That brings back beautiful memories to my mind, although I know some would say that it is not healthy or good.

I remember then when we used to drive with him. It comes back.

And it is fun like now when I was in calf-marking, we drive the ATV there and it took almost two hours one way, one trip, and I just enjoyed every second, every minute, although it is sometimes hard also to sit at an ATV, but I could have sat forever at it, I couldn't have never gone off the ATV.

In my opinion it is one of the most fun things you can do.

But I also know it isn't so good for the nature, if you think in terms of the nature, and especially when you don't use it for work like the reindeer herders do, like a gear or something they are dependent on in their herding or where they work.

And I also think about that it is not maybe so good that I just drive for fun.

But at the same times it brings back lot of memories, and it is something I and like my brother have always liked engine and the scooter during the winter.

And, the smell it gives.

It is not just the sound, but also the smell, the fuel smell that in my opinion...

I don't know but it brings back beautiful memories to my mind.

But I know some would say that it isn't good to just drive but I don't do it so often, so I don't think

it's the hugest problem,

but yes...that it is at least one sound

that means a lot to me, it is the sound of ATV. I feel a feeling of freedom when I drive.

It is like I leave everything behind, the bad thoughts or the

difficult thoughts,

it is a feeling of freedom to drive,

I don't know but it cant really be described,

*čilget, muhto dat lea fiina jietna ja maid
munnje addá hui olu muittuid, boares muittuid
manáivuodas bohttet fas ruovttuluoatta, ja dat
lea somá.*

*Ovttá eará jietna mii munnje addá fas dovddu
ahte mun lean dávviiin ja sámii eatnamis, dat
lea go gulán riskku.*

*Go mun lean eanemus gávtti coggan ja
riskkuid bidján go mun lean leamašan dávviiin,
iešgudet doaluide vuolgán dahje rahkanán, ja
dat lea aibbas seammá ATV:n.*

*Ahte mun lean dieđusge eanemus vuoddján
ATV ja maiddái skootera go mun lean
leamašan davviin.*

*Nu ahte dat lea guokte iešgudet jietnaid mais
gullo sápmi mu mielas, munnje goitge.
Riskku lea mu mielas, diekkar jiena mii munnje
čilge dahje muitala ahte dat mii leat
čijadeamin, dal lea juoga doallu gosa mii
áiggut dahje, dábálaččat lea erenoamáš siva
manin mii riskku bidjet.*

*Go ovdal dieđusge dat lei eanet dávjá ahte
olbmot cogge gávtti árgabeaivvis, muhto
dánáiggis, mun goitge, mun anán dušše gávtti
jus lea erenoamáš doallu dahje dilli.*

*Don gulat ovtatmano muhtin boahtimin
gávttiin, muhtin gii lea gávttiin čijadan, go dan
riskku jietna lea nu jalla garas, alas.
Dat gullo nu issoras bures.*

*Dat soaitá leat vaikko man guhkin eret, dat
soaitá leat manga mehterat dus eret muhto don
gulat liika ahte muhtin lea gávttiin čijadan ja
dat lea mu mielas maid fiinna jietna.*

*Ja maiddái jus mun áiggun čijadit gávttiin, de
leat dieđusge riskku dan buot fiinaseamus
oassi gávttis, mu mielas goit.*

*Ja dat mearkkaša goitge hui olu munnje, mu
riskkuid, daid leat helt mávssolaš munnje.*

*Mun lean oaččun konfirmašonskiehkas.
Jus mun áigguin dego konkludere mu mielas,
go dus leat riskku don dieđat dat leat juogá
eronamaš mii dáhppáhuvvá, ja dat lea, ii alo
somá dat soaita leat hávdádeapmi, maid de ii
lea dieđisge somá, muhto erenoamáš go don
galggat heajaide dahje konfirmašuvdnii dahje
márkanastit, don leat čijadan somá dilli dihte,
oačču lohkkat.*

*Nu ahte go mun gulán riskku de dieđan ahte
mun lean ráhkkanahhtán ja lea ráhkkanahhtit
mu mielas, dat láve goitge leat hui somá.*

*Olmmoš han lea oalle speanta ja diehta ahte
dat šaddá buorre beaivvi.*

but it is a nice sound that gives me a lot of
memories, old memories from the childhood
that comes back,
and that is fun.

Another sound that brings me a feeling of
being in the north, and Sámi land, is when I
hear riskku.

I have put the gákti on mostly when I have
been in the north, when I have been on my
way to an event or getting ready, and it is the
same as the ATV...

...Because, of course, I have driven ATV the
most when I have been
in the north.

So that is two different sounds that belongs to
Sápmi in my opinion, at least for me.

Riskku is in my opinion, a sound that for me
tells that now we are getting ready, now there
is an event that we are going to, usually it is a
special reason for why
we put on the riskku.

Before of course it was more normal to use the
the gákti as a daily use, but today, at least me,
I use the gákti when it is a special event or
occasion.

You hear immediately someone coming with
the gákti, someone who have put on a gákti,
when the sound of the riskku is so loud.
You hear it so well.

It can be from far away, many meters away
from you, but you still hear that someone has
put on the gákti, and that is in my opinion also
a beautiful sound.

And also, if I am going to put on the gákti, the
riskku is the most beautiful part of the gákti,
in my opinion.

And it means a lot to me, the riskku, they have
a great value for me.

I got them as a present when I got confirmed.
If I am going to conclude in my opinion, when
you have the riskku you know that something
special is happening, and that is not always
fun, it can also be for a funeral, which is not
fun of course, but especially when you are
going to a wedding or a confirmation or a
festival, you put it for a fun occasion, if you
can say it like that.

So, when I hear a riskku, I know that I am
getting ready, and getting ready is something I
really like.

You're pretty excited and you know it's going
to be a good day.

Áilu Valle

Dat lea hui dehálaš ahte don válddát áiggi guldalit³²⁶

<i>Mun lean juste dál ge guldaleamen, mun guldalan dien Juutuanjoga ahte maid, maid dat muitala.</i>	Right now, I am listening. I am listening to this Juutuan river, and also to what it's telling me.
<i>Dieđusge guldaleapme lea okta nu go várra deháleamos dáiddaiguin dahje máhtuiguin mii dus sáhtta leat eallimis oppa lohkaí ge ja duon dat ahte go don jođat sámis don leat olgun don lea meahccis jávrri alde dahje joga alde gos dal de, deaivvat ge leat dal de.</i>	Of course, listening is probably one of the most important arts and skills that you can have in life, at least when you are traveling in Sápmi.
<i>Dieđusge don gulat daid luonddu jienaid muhto don sáhtat gullat olu eará ge go dušše bere daid.</i>	When you are out here, in the meahcci, or when you are by the lake or by the river, there comes a moment when it all hits you.
<i>Ja dat ahte dus, dat lea hui dehálaš ahte don válddát áiggi.</i>	You hear the sounds of nature, but you can also sense much more.
<i>Don it vealldegeahte gula dan, dan sielgga, dahje dan, oačču dan oahppu vuosttaš guldalemiin, ahte ferte veahá orustit ja vuoijjastit ja bidjat áiggi dasa diená ahte, don gávnnat doppe dan juoga maid don leat ohcamin dahje bealddegeahte don it ba dieđe ahte don leat ohcamin.</i>	And it's very important that you are taking time to listen. You don't just hear it – its purpose, its full picture – on the first listen.
<i>Aistton bealddegeahte leat ohcamin oppa lohkaí ge muhto don lihkká fitnet doppe vástádusaid ja.</i>	You have to pause for a while, breathe, rest, and give it time. Only then might you find what you're looking for – or perhaps something you didn't even know you were looking for.
<i>Gal mun diená smiehtan smiehtan buot daid luonddu jienaid de dieđusge juste dan čázi jiena dat rávdnji, gorži, mii dal de deaivá dat lea okta hui, hui dakkár mii lea váimmu láhka ja dieđusge lea bajásšaddan mánávuođaruovttus ge diená jávregáttis ja.</i>	Even if you are searching, in the end you will probably find the answer there. I'm reflecting on all these sounds of nature, and of course the sound of the water, the current, the waterfall. It's something that resonates deeply, something close to the heart – that is, of course, due to growing up here, a place that was a childhood home, on the banks of the lake.
<i>Dies duottarmáilmmis maddái das duoddararat dat han lea duottarmáilbmi doppe Gámasmohkis de okta lea bieggá maid don guldalat, muhto, dieđusge lottit leat maddái dakkárat mat nuo, lea álo leamašan munnje dakkár mii addá fámu ja movtta ja sáhtta vaikko jeđđet ge dihto diliin ja.</i>	In this sea of duoddarat [tundra mountain plateau] – in these duoddarat... well, yes it is a sea of duoddarat... – there in Gámasmohkki, one thing you hear is the wind, but of course birds are also something that have given me some kind of power and motivation, and they can comfort me in certain situations.
<i>Gal mun lean leamašan diená, mánávuođa rájes hui liikostan lottiide ja mun lean dieđusge daid dutkan dalle jo mánávuođas olu ja mun lean tevdnen buot diekkár loddegirjjiid ja buot diekkáriid, ja, ja oahpahállan dait lottiid jienaid ja diená ahte dat lea leamašan munnje diená nugo ustibat dat lottit.</i>	So that, I've always been this way. Since childhood, I've had a deep love for birds and spent so much time studying them. I used to draw my own bird books and all these kinds of things around them. And I learned to recognize their voices, and over time, those birds became like friends to me, those birds.
<i>Ja dieđusge dat lottit diená, dat han álo maddái čájehit dan ahte man muttus jagis mii leat</i>	And, of course, the birds also reveal which part of the year it is. One bird announces

³²⁶ “It is very important that you take the time to listen”

mannamin, ahte dat lea, okta loddi muitala
ahte gos giđđa lea boahtimin, gos dat njuvččat
seivot, johkagierrái ja.

Ja geassit fas ahte lea go dat giehka mii guhká
dahje giellavealgu mii lávlodišgoahta de dat
álo muitala dihto mutto mii lea boahtimin.
Ja diedusge lea dihto diená nu go smiehtá dáid
dihto dáhpáhusaid go lea oaidnán lottiid ahte
don oainnat justte dihto áigái man nu.
Garjá dahje skuolffi dahje duottarskuolffi
dahje.

De dat lávejit maiddá buktit diená dunnje
justte dakkár sielggaid ahte dát lea, dál don
galggat váldit dán ášši vuhtii ahte dát lea dat
mas don boadát oahpat dál, juoiddá ođđa
dahje das lea álgimin juoga ođđa muddu du
eallimis, dahje mii dal de beare.

De duon, diená jos mun smiehtan iežan
dáidaga maiddá dienu, diedusge lean bargan
rap-musihkka dahje rap-musihkain de várra
álggahin diená veahá nu dakkár árbevirrolaš
rapvugiin diená ahte doppe dušše leat dat rap-
beatat muhto dalle dat Viidon Sieiddit álbuma
dat goalmát de dat lei dakkár masa mun
háliidin veahá nu máhcat diekko daid lottiid
máilbmái ja diedusge seammás han dat lea
maiddá diekkár nu indertekst doaluvuohta
das Áillohaš-rohki dáiddai ja duon, ahte sus
ledje maiddá dat lottit álo doppe.

Ja dien láhkai han dat lea maiddá dakkár nu
friddjavuođa symbola dien láhkai ahte lottit
sáhtet girdilit ja seaivut ja diená ahte dat ii
leat diená ahte seammá lahkai čatnon
eatnamii go maid olbmot leat ahte dat han lea
álo maid dat dihto dakkár áibbašeapme dohko
áibmui don beasat girdašit ja nie.

Nuo jos don ráhkadišgoadát dakkár albuma
mas don háliidat nugo oažžut daid jienaid
bokte muitalit dan máidnasa dahje muitalusa
das ahte gos don leat eret dahje mii dat lea
dutnje dat oahpis ja oadjebas guovlu dat
ruovttoguovlu de.

Lottit leat hui diená nugo lunddolaš
válljejummi.

Lottiid jienat iešguđet ge lottiid jienat dat
diená nu don sáhtat buktit ovdan dan dakkár
nugo čáppa dovdduid, unohas ge dovdduid
dahje ahte don bohkosat jos don smiehtat
rievsat dahje skire de dat han lea justte mo
mun daid dahje mo moai dainna Canada
sápmelaš, anáraš Raquel Rawnin
ráhkadeimme daid jietnaduovdagiid, de
háliideimme válljet justte diet na ahte dat skire
lea, dat čaibmá, muhto dat maiddá sulastahtá
dasto dan njealljejuvlla jiena go don sáhtat

that spring is coming,
where the swans are arriving at
the riverbank.

And, again, in the summer, it's when the
cuckoo [*Cuculus canorus*] goes on and on or
when the bluethroat [*Luscinia svecica*] sings,
they tell us something about what's coming.
And of course, one can think of cases of birds
showing up just at certain specific times.

The crow [*Corvus corax*] or the snowy owl
[*Bubo scandiacus*] or the owl of the
duodarat, they use to bring to you a certain
purpose, so you have to take into account
that you are now going to learn
something new, or this is the beginning
of something new in your life, or
something like that.

And then, if I reflect on my own art,
of course I've done rap music or I've worked
with rap-music.

It probably started with that kind of traditional
rap, where there is just a rap-beat, but then in
Viidon Sieiddit – my third album – it was
where I wanted to go a little back to the world
of the birds, and of course at the same time
it is also some kind of referential celebration
to the art of late Áillohaš and
the fact that he also had those birds always
there.

And like that it is also some kind of
symbol of freedom, as the birds can fly and
land, and they are not like
tied down onto the ground in the same
way that people are, there is
always a longing for the sky where you get
to fly.

So if you make an album
where you desire to tell through sounds
the story of where you come from,
what is familiar to you
and to your home
area...

Birds to me are a very natural choice.
The sounds of birds, each of birds' voice is
like so that you can bring forward some kind
of beautiful feeling, or unease feelings, or it
can make you laugh if I think of the ptarmigan
[*Lagopus lagopus*] or the magpie [*Pica pica*].
That was exactly how I, together with
Canadian-Sámi from Anár Raquel Rawn,
made these soundscapes. We wanted to
precisely choose the way the magpie is
laughing. But this sound is also like that of the
four-wheeler ATV, so you can twist the
samples in a certain direction.

dasto botnjat dan sámples dan guvlui ja das
 boahta de dasto dakkár nu mii čatná oktii dan
 oasi dan muitalusas diená ahte dihto láhkai
 dat maid dat symbolisere veahá nugo olbmo
 jállodat diená ahte dat skire go čaibmá de dat
 veahá nugo muitala dakkár, dat lea dakkár
 jallas boagusteapmi.

Ja go dat rievdá dasto dan njealljejuvlla
 jienain de duon dat muitala fas dan olbmo
 jallodagas ahte dat lea dat teknologijja mii
 stivre ja dihto láhkai gáidoda olbmo.
 Muhto seammá oktavuodas de dat lea maiddá
 dat veahkkeneavvu mannja don birget ja
 ceavccát doppe luonddus ahte gal han sámis
 ge dieđusge nugo buohkat dihtet de dat lea
 oalle guorba guovlu oalle garra báiki diená
 láhkai ahte ii dat gii bere birge sámis diená
 jagi birra ahte dat lea dat árbevierru ja dat
 ahte don oahpat eallit dan, dan birrasis de.

Don dieđusge dárbbášat maiddá de
 veahkkenevvui.

Ja duon, na...

Na gal mun dan rievssahis dat lea veahá
 seammá, haha, seammá symbola lea dan
 rievssaha čaibmamis maiddá dat lei dieđus
 dat nubbi bihtá das dan albumas mas dan.
 Mas fas lei dakkár gieldda dihto láhkai ahte
 das lea guokte nu go iešguđetlágan lottit ahte
 doppe lea rievssat lea dat, dat loddii mii lea nu
 go.

Na rievssat jađe de lea boaimmáš diená ahte
 dat lea guokte lotti, nubbi lea spire ja nubbi
 fas ii ahte das mun fas háliidin hukset dan
 diená, mun geavahan han dan vuhten dan
 rievssaha skeaikima ahte dat lea symbolisere
 dan dihto lágan jállodaga mii máilmmis lea,
 dahje dat lea dihto perspektiivvas diená
 jállodat muhto dat de.

Dat ahte luonddus dat lea dieđusge okta
 guovddáš.

Dynamihkka lea dat ahte doppe lea dat spire
 ja dasto dat man dat spire borrá ja dat lea dat
 mii dihto láhkai dieđusge speajalda olbmo
 máilbmái maiddá ja dat ahte man guhkkás
 olbmot áddejit dan, man diđolaš olbmot leat
 sin spirevuodas ja diená ahte mii leat goitge
 dakkár diđolaš eallit mii.

Mis livčče náka eanet ge leat diená, vel eanet
 diđolaččat das ahte mii eat divttáše nu olu
 daid min spirevuoda stivret min eallima.

Muhto ahte, na.

Dat lea dieđusge veahá alo dieid
 mu bihtáiguin dat
 ahte geasa
 dat lea oaivvilduvvon.

And so then comes something that ties
 together the pieces of the story in a certain
 way that also symbolizes, to some extent, a
 statement where the laugh of this magpie is
 kind of mirrored
 by the foolishness of people, a sort of
 foolish laugh.

When that changes into the four-wheeler's
 sound, then it's talking about the foolishness
 of people where the technology is controlling
 and, like, guiding people.

But the same connection is also that of
 an aiding tool to manage and survive in the
 nature, that of course in Sápmi – everyone
 knows – it is a very difficult area, a very hard
 place, in a way that it is not just about who
 manages today in Sápmi, that it is tradition
 and that you learn to live here,
 in this environment.

You certainly need also
 the aiding tool.

And there, well...

Well, I think that for the ptarmigan it's
 pretty much the same, haha, the same
 symbol is that of the ptarmigan laughing,
 although of course that was in the second bit
 of the album. But again it is such an
 interdiction in the way it has two different
 kinds of bird, where there is the ptarmigan
 there, that is like...

...Ok so, there's the ptarmigan and there's the
 buzzard [*Buteo lagopus*], these are the two
 birds; one is a wild animal and the other is not
 that I wanted to build on that, but I used it to
 describe the ptarmigan laugh that symbolizes a
 certain kind of foolishness in this world, or
 that it's a certain perspective of foolishness,
 but that's it.

Something that, in nature, is of course one
 cornerstone.

The dynamic is that there is this wild animal
 and then there is what this wild animal eats,
 and this is kind of mirroring, of course, the
 human world and also how far people
 understand it, how conscious people are about
 their "wild" nature and that we could become
 such conscious about our life.

We could be more than this, even more aware
 than when we don't let our "wild" nature
 control our life.

But that, well...

It's of course always a little
 bit like that with my pieces,
 and who they are
 meant for.

*Ahte na dieđusge dat lea, diet lea hui diekkár
dáiddaláš albuma oppa lohkaí muhto.
Ahte, mun jáhkkan dat lea sámiguin ja eará ge
eamitolbmiguin mángii dat, ahte mii leat
oalle diená nu go.*

*Dat lea lunddolaš oassi min dat eallivuohka
maiddái ahte mii leat, mis lea dat maiddái dat
siskkáldas spire ja diená ahte mii leat
dieđusge lágat oktavuodas daid, buot daid
eallit de mat leat das min birrasis de mii várra
áddet dan eará láhkai muhto dat ahte, go eallit
dakkár globála servvodagas de mun in dede
leigo das šat nu čielggas ahte vuhtto go dat šat
gos dat manná dat spirevuoda ja
olmmošvuodarádjá muhto jo dat gal manai ge
hui filosofalaččat dás dát hommá.
Na jos mun smiehtan eará lottiid mat ledje das
mielde de na dieđusge njuvččat lea okta, okta
diekkár loddi mii dieđusge lea oalle bivnnut
symbola maiddáid eará duon álbmogiiguin go
dušše berre sámiguin dahje oppa
eamiálbmogiiguin ahte dat lea.*

*Dieđusge symbolisere diená dakkár nugo
dakkár lotti mii gávdná dan guoimmi ja dat lea
dan olles loahppa eallimma dáinna ovttan
guimmiin de dat dihto láhkai.*

*Na jos dal smiehtá go dál mun hállen diená
eanet ge diená konkrehkalaččat justte daid
jienaguin mat sámis leat muhto das dego
smiehtá diená nugo ahte don guldat ge
máinna nu earán go don guldat dáinna, daid
beljiiguin, ahte don guldat gamuin dahje
dovdduiguin dahje diená ja, ja dihto láhkai
ahte dalle, dalle mun in smiehta dan áiggi, dán
áiggi, mun in smiehta daid diená nugo
sekunddan dahje diená minuvttain dahje
beaivin muhto diená guhkit skalas dahje diená
guhkit áigge gaskal ja de dieđusge dalle dat
han lea, dat guldaleapme lea dasto dat ahte
don gulat, don áiccat dan ahte man láhkai dat
luonddu ritmat rivdet diená ahte dieđus justte
dál go mii eallit dán áiggis mas buot rievdá
hui jođánit, ja duon na ieš alddis dál dat gal
bukta fas dás, konkrehkalaččat lea justte dat
ahte dáppe bieggá hui garrasit.*

*Dát ii leat diená, dat ii leat dábálaš dat masa
lea hárrjána ahte bieggá ná olu ahte.*

*Dál ge geassit go mun fitnen jávrri alde de
leimmet doppe moadde ija de dat ijat ge ledje
diená ahte dat olles ija biekkai nu garrasit
ahte illá bissu dat tieltá doppe sajis ahte, dat
lea hui ártet, muhto nuppi dáfus dan ádde hui
bures ahte na dat lea maid mearka das ahte
man láhkai dat olles eana dahje eatnanspábba*

That of course it is a very artistic
album in the end.

That I think with the Sámi and with other
Indigenous peoples we are already
this way.

It is an essential part of us, the life that we
have, is inherently “wild” and also kinda that
we are more closely connected there. All the
animals that are in our environment, then we
probably can understand things differently that
when we live in such a global community then
I don’t know if it was so clear that we knew
where the limit between “wild” animalness
and humanity would it be,
but now this took a rather
philosophical direction.

So if I think about the other birds that are here,
then of course the swan is one... one kind of
bird that is certainly a much appreciated
symbol also among other Indigenous peoples,
than just with the Sámi or with all the
Indigenous peoples is of course a symbol.
Of course, it symbolizes something like a bird
that finds the partner and stays with this
partner until the end of its life,
in a certain way.

Well, if you think about it, now I’m talking in
more concrete terms, specifically with the
sounds here in Sápmi, but reflecting on the
way you are listening with something other
than what you are used to do – not just with
your ears –, with your gut or with your
feelings, in a certain way one does not think
about time, one stops thinking about time
as seconds, or as minutes, or as days.

I instead think on a much longer scale,
with so much more time in-between.
And of course, when you listen like this then
you hear, you notice how the
rhythms of nature are changing right now,
in this time we are living in, where everything
changes so rapidly. So, now with that said, it
brings me back here, concretely speaking
about how is that the wind blows so
strong here.

This is not normal; this is not what people are
used to... it winds so much.

Now, in the summer I went to the lake.

We stayed there for a few nights, and those
nights the wind blew all the time. It was so
strong that the tent could barely stay in place.
It felt very strange, but at the same time, it
became clear that this is yet another sign of
how the whole Earth, or the entire planet, is in

*lea dakkár dihto láhkai dakkár
eahpedássiid dilis ja mii lea dieđusge
olbmui, olbmui duon dáhkamuša čuovvumuš,
de duon.*

*Dat ahte oalle mángasat dieđus nie várra dan
áigge go smiehtta de gal várra buohkat goit
dat juoga nu duon dásis áddejit dan ahte mii
leat diekkár stuorra rievádusaid áigodagas
muhto dat lea dieđusge eará ášši dat ahte gii
háliida guldalit gii dohkeha dáid jienaid vuoi
háliida go dan dušše giellit diená ahte na mun
in jáhke dasa vaikko don oainnat iežat
čalmmiiguin ja sáhtat ieš ge daid gullat diená
muhto ahte dies go dien konteavsttas go
smiehtta dan guldaleami ahte man dehálaš dat
lea, ja justte dat ahte veahás orusta ja diktá
daid jienaid boahit diená ahte dat guldala
daid jienaid ja guldala maid dat muitalit jađe
livččii vel gárvvis dasa ahte bargagoadášii
áššiid dan vuodul dahje maid dat jienat
muitalit de.*

*Dat livččii dieđusge hui dehálaš diená nugo
máilmmi viidosas dásis diená ahte olbmot,
stuorra olmmošjoavkkut jáhkigoadášii daid ja
dihto láhkai ahte dat šattašii diená nugo dat
maid dat olbmot guldalit, eaige dat ahte
olbmot guldalit daid duon politihkkáriid
giellásiid dahje duon konsumerisma bokte
bohtan giellásiid, daid giellásiid maid buot
TV-káanalat ja interneahhta dutnje buktá dat
vuvdet dutnje, vuovdalit dutnje buot lágan
buktagiid de dat ahte earuhivčče dan ahte dat
ii leat dat duodalaš jietna dat ii leat jietna
oppa lohka ge ahte dat lea dakkár šlápma
dahje dakkár moivi.*

Na ahte duon.

*Na... Dat ahte oahpašii guldalit, daid
duodalaš albma jienaid, de dat lea, dat lea
dieđus...*

Dat lea dehálaš.

*Na gal mun lean dan veardde, dan veardde
čáhpes vilges olmmoš ahte duon, gal munnje
máŋgii diekkár nugo fastes maskina jienat ja
diekkár ahte dat lea dat unohas jienat diená
ahte go dat ii leat, dan namas lunddolaš jienat,
maid dát jienat leat maid mii dás dál gullat
muhto...*

*Dieđusge don sáhtat rievdadit dan
perspektiivva ja dadjat ahte dat gal leat maid
lunddolaš jienat danin go luondus dat han
lea buot bohtan nugo olbmot ja buot dat
teknologiiija maiddái muhto ahte dat lea fas
dan dihto láhkai várra dat áigegaska justte dat
ahte man guhkká dasa lea mannan ahte dát
jienat leat šaddan mii dat lea dat proseassa*

such an unbalanced state. And, of course,
something like that is consequence
of human action,
there's that.

Now that I think about it, lots of people, I
guess almost everyone today, have a certain
degree of understanding that we live in such a
time of huge transformations, but that of
course is another matter for who really cares
to listen and accepts those sounds or who just
wants to deny them: I don't believe it even if
you see this with your own eyes and if they
you yourself hear it.

But in a context where you reflect about
listening and how important it is,
precisely you just stop for a bit, let the sounds
come and you listen to them.

And you listen also to what the sounds tell in a
way that you are ready to do something
accordingly, based on what those
sounds tell you.

It would of course be very important on a
global scale that people – larger groups of
people – start to believe that and somehow the
situation would become like that people are
truly listening; not falling for the lies of the
politicians or those lies that come through
consumerism, lies that all the TV channels and
the internet bring you and sell you, they try to
sell all kinds of products.

So they would distinguish that that is not the
real sound, it's not even slightly a sound,
But rather some kind of noise
or some kind of
chaos.

So that, well...

So... That someone would learn to properly
listen to the real sounds, that is – of course...
That is what is important.

Well, I am that kind of... that kind of black
and white person that many times to me those
ugly machine sounds feel like
uncomfortable sounds, because
it's not in the name of the natural
sounds; like these sounds are,
what we hear now,
but...

Of course you can change the perspective and
say that, well, those are also natural sounds
because they have all come from nature, like
humans and all the technology too, but in a
certain way that is again the time frame for
how long it has been that these sounds have
come and what is the process from where are
they born, the sounds, that if you think about

*mas dat riečádit dat jienat ahte jos smiehtá
dán, dán joga jiena dás de mánga million jagi
lea dasa mannan ahte diekkár jietna lea
šaddan ahte diet johka lea dies ahte dies
boahta diekkár jietna de dat lea várra dat
lunddolaš proseassa go dat bistá nie guhká
muhto dasto dat olbmu teknologijja jienaid dat
áigegaska mii dan proseassas šaddá de dat ii
leat go moadde lot jagi dihto láhkai ahte dat
lea dakkár diena nugo hui čeahkkái duon
biddjon áigegaska dihto láhkai, in mun dieđe
máhtan mun gal dan nu bures čilget muhto,
muhto duon, de várra dat ahte dat lea dakkár
fáhka ja dakkár, dat ii leat nu dat ii boade de,
dat ii šatta diena nugo iežanassii muhto ahte
dat lea diena nugo veahá bággejuvvon dahte
bagguhuvvon.
Dat lea dakkár baggu jietna mii boahta dieid
rusttegiiguin.
De dat lea, dat lea unohas ahte dat lea várra
oppa lohkaí ge dat ahte, na dieđusge han dat
lea seamma láhkai han dat lea olbmuide
unohas jos gii nu bakkuha du.
Mus lei vel juoha muhto in mun šat muite mii
dat lei.
Na, jo.
Na dieđusge dat vel ahte go smiehtá nie, diena
nugo olbmo... dat ahte go dieđusge, go máhtá
guldalit dan birrasa ja, ja, juste diena maidái
guhkit áiggi gaskas ja diena.
Muhto, dat ahte dat dihto láhkai gáibida dan
ahte don maidái máhtat guldalit iežat
goruda.
Maid dat muitala, makkár jienat doppe bohtet
ja, ja dieđus maidái nugo guldalit iežat
miela, danin go dat lea buot maid dat seamma
luondu, ja duon.
Dat lea maid okta ahte mii, várra gáidada
olbmo, ja dat lea, de lea várra dat ahte duon,
dat kapitalisttalaš máilbmi de dat vuovdá
olbmuide dakkár buktagiid mainna don diena
nugo dagat dan du iežat goruhis dakkár mii ii
dovdda šat nu hearkeht.
Ahte dat šaddá diena diekkár ruovasin ja
diena ahte don, don it earut šat nu bures daid.
It daid iežat goruda jienaid ja it ge iežat miela
jienaid, it ge dalle dan iežat birrasa jienaid
maidái ahte, ahte deike lea várra dihto
láhkai.
Don it leat šat bastil.
Dahje don it leat šat hearkeht.
De dalle don it, dalle don it šat earut, dalle
don it šat gula, de duon, na.
De dat lea maid okta man vuostá galggašii
máhtit diena.*

how the sound of this river here, many
millions of years have passed since such sound
came to be, since the river brings that sound.
It's probably the natural process, because it
lasts for so long.

But then the sounds of human's
technology the time frame that happens in that
process then it's only a couple of decades, in a
certain way that it's kind of like a very
condensed timeframe in a certain way. I don't
know if I was able to explain this very well,
but... but the fact is probably that it is kind of
abrupt and kind of... it's not like it doesn't
come;

it does not come naturally by itself,
but it is like a little forced or
pushed through.

That's the kind of forced sound that comes
with these machines.

And it is... in the end, it is probably
uncomfortable in the same way it is
uncomfortable for people when someone
forces you.

I had something else, but I don't remember
what it was.

Oh, yeah.

Well, of course, when you think about, like,
people... of course, when you know how to
listen to the environment and also for longer
timeframes, that requires that you, in a certain
way are able to listen to your own body.

What is it telling? What kind of sounds are
coming from it?

And of course also like listening to your own
thoughts, because everything is also of the
same nature...

and well...

That's also probably something that is guiding
people, and that is probably a result of the
capitalistic world that is selling this kind of
products to people that do something in your
own body, something that makes it not so
sensitive anymore.

That is becoming so hard/gray and you can't
tell the differences that well anymore. Not the
sounds of your own body and not the sounds
of your own thoughts. Not even the sounds of
your own environment, it is dangerous in a
way.

You are no longer sharp.

Or you are no longer sensitive.

And then you can tell the difference, then you
don't hear, so that, well...

...that is something one should be able to fight
against.

*Dat lea dat man vuostá galggašii dáistalit,
muhto, muhto duon fas dat mii dás lea dál dát
jienat mat bohtet de dát leat dat maidda
galggašii diená nugo vuollánit dahje diktit
daid berre boahtit ja, návddašit.*

*Na dieđus okta mii lea hui, hui guovddášis dan
Sámi eallimis, Sámi eallimis ja Sámi
áddejumis ja, ja na. Dat lea dan eallima
váibmosis de dat han lea dieđusge luohiti ja
dieđusge iešguđet luohteárbevierut iešguđet
guovlluiguin muhto dat ahte luohiti han
namalassii, dat han lea nugo guldaleapme
diená ahte, ahte dat luodit bohtet, dat bohtet
diená nugo dávjá, dávjá doppe meahccis
jođidettiin.*

*Dat ii leat diená ahte don vikkat ohcat daid
luđiid muhto dat luodit bohtet dutnje, ja mađe
dárkileabbo don guldalat dahje attát saji dasa,
de, dađi diená nugo lunddolabbot dat bohtet
dahje dien, dađi álkkibut dat bohtet.*

*Ja mun dal geavahan das dakkár
komparatiivva-sániid.*

*Ii dárbbas veardádallat muhto diená ahte,
ahte duon.*

Dat lea maid dat okta justa ahte ii.

*Ii nu dáistal iežas luonddu vuostá, ahte duon
attát dan saji alccet, ja lundui de dalle, dat lea
nugo dat skeaŋka maid don oaččut, das lea
sadjái don oaččut das, das daid luđiid ja
dieđusge dat luodit sáhtet leat dat ealli luodit,
báikkiid luodit dahje olbmuid luodit ja.*

Na.

Dat lea dat lunddolaš vuohki, álbma vuohki.

That's what you should be fighting against,
but, but then what you have here, these sounds
that are now coming [the river], then it is
when you you should give up and let them
come, and enjoy them.

Of course something that is at the very center
of Sámi life, Sámi way of life and Sámi
understanding, that is the heart of life, and that
is of course luohiti. And of course there are
different traditions of juoiggus from different
areas, but luohiti remains a constant.

And well that is also listening.

Luodit are coming, and they come often...
often when you are

traveling.

It's not like you are trying to look for luodit
but luodit come to you, and the more
carefully you listen or the more space you
give to them, the more they come in a
natural and easier way.

And now I am using these
comparative words.

You should not compare but that,
well.

That is also one thing that doesn't...

It is not so much like protesting against nature;
you are giving it space, and to nature it's like a
present that you get, it has space that you get
from it, from the luohiti. And of course the
luohiti can be the animal luohiti, the place
luohiti or the person luohiti.

So...

That is the natural way, the proper way.

Inger-Mari Aikio

Ráfi jienat ja jaskatvuohta báhcet millii dakkár bottut³²⁷

*Mun in goassige jurddaš ahte dál mun
guldalan, muhto mun lihkká dan de dat jienat,
dat mearkkašit hirbmat olu.
Dat bohtet de doppe gosnu.
Ja, dat mannet mu sisa.
Ja, go lean jođus erenoamážit, mun fuobmán
ahte, doppe lea menddo olu riedja.
Ja, dát váikkuha munnje nie ahte mu sisa
šaddá dego dakkár čáhpes fápmu.
Ja mun átestuvvan ja orru ahte mun in sáhte
leat doppe šat guhkit.
Erenoamážit gávpogat leat dakkár báikkít
ahte dat lea veadjetmeahtun orrut doppe
guhkit áigge.
Dat orru ahte dat garra jienat dego borret
mus bihtáid bihtáid mieldie.
Ja go mun leamašan vahkku gávpogis de orru
dego mus lea jávkan juo oassi das mii mun
lean.
Muhto de fas go, ovdamearkadihtii boadán
deike ruoktot Sápmái de mun čohkkán das
olggubealde dat lea bieggá ja sáhtá leat
doppe beštor dahje sáhtá leat rievssat.
Dat lea, dat leat jienat muhto
dat lea ráfi jienat.
Ja jaskatvuohta, dat báhcet millii
dakkár bottut.
Čakčat mun sáhtat čuččodit doppe jávregáttis,
ja dat lea áiddo jiekŋumin.
Jiekŋui jo veahá ja lea jiekŋomin ja ássumin
dat jiekŋa.
Dat jienat mat das bohtet, dat gullo dat
“krakk krakk”.
Dahje dakkár bohkas go jiekŋa lihada
ja šaddá ja.
Dat lea imašlaš boddu.
Dat lea juoga maid don it gula juohke beaivve
muhto don dieđat ahte go čakčat maŋit lea
skábman de manat dohko
jávregáddái don gultat ja dat
lea hui fámoláš dovdu.
Dat lea áibbas jáskat, ja de lea fáhkka dat, dat
jiekŋa dego eallá.
In dieđe jos mun galggašin leat doppe gosnu
máilmmis eallit gávpogis.*

I never realize that I’m listening,
but still I’m moved by the sounds,
they mean a lot.
They come from somewhere.
And they are going inside me.
Especially when I’m travelling somewhere,
then I discover that it’s way too loud.
And this affects me in the way that... inside of
me, it becomes like this dark power.
And I despair and it feels like I can’t be there
no longer.
Especially cities are those places that
it’s impossible to stay there
for a long time.
It seems like those strong sounds, they are
eating me piece by piece.
When I’ve been for a week in the city, it feels
like a part of who I am has disappeared.
But then when I, for example, arrive home in
Sápmi, then I’m sitting outside here and
there’s the wind, and there could be beštor or
rievssat, birds of all kinds.
And those are sounds too. But they are
peaceful sounds.
And silence, they leave the mind in such a
resting state.
During the fall, I can be standing by the
lakeside, and the ice is starting to form.
The ice is forming little by little, freezing and
settling.
And the sounds that are coming from that,
sounds like “krakk krakk”.
Or like this grinding sound of when the ice is
moving and developing and...
It’s this strange tranquillity.
It’s something that you don’t hear every day.
But when you do, then you know that fall is
here and, after that, skábma is coming to the
lake too – it’s a very powerful feeling to hear
those sounds.
It’s completely silent, and then suddenly, the
ice is like it’s alive.
I don’t know if I could be living in a city
anywhere in the world.
I think I would go crazy.

³²⁷ “Peaceful sounds and silence give the mind some rest”

Jáhkan mun gal seahkanivččen.
Ahte lean ge bjdjan mu smeihattat maiddáa ahte
imaš ahte gávpogis leat nu olu dakkár
átestuvvan olbmot ja dakkár olbmot nu mo
geat barget bahájjid, sáhttet vaikko goddit
nuppi olbmuid.
Dat jienat han vaikkohit nu olu midjiide.
Muhtimat lohket sii liikojit leat
gávpogis doppe dat lea dat eallin.
Oh mun in ádde dán.
Muhto dat lea dieđus go mun lean hárrjána
deike Sápmái ja dáppe lea nu jaskat.
Dáppe don duođaid gulat dakkár áibbas
jaskes jienaid maiddáa.
Gávpogis dušše dat garra jienat dat bohtet ja
mannet du čađa.
Gii doppe gullá maidige dakkár áibbas
smávva unna jienaid?
Ovdamearkadihti das lea sullii
vihttanuppelohkáa jagi dassái go dat máđut
borregohte dáppe min sojiid lasttaid.
Jos gii nu livččii muitalan munnje ahte don
sáhtat gullat go dat máđut borret lasttaid de
mun in livčče jáhkán.
Muhto mun čužžen dan muora vuolde, dan
soaji vuolde ja guldalin.
Dat orui nu imaš goal dat guldalit duháhat ja
duhahát máđut borramin daid lásttaid.
Sáhtat gullat dan.
Dat lei maid imašlaš boddu.
Muhto ii don gávpogis gula diekkár.
Vaikko livččii olu máđut de mun in jáhke ahte
doppe gii nu váccašii, čužžošii ja guldalit go
máđut borret lasttaid.
Deike lea gal maid bohtan dat jienat maid
mun illá háliidivččen guldalit.
Mis lea siidaguoibmi dat geas lea
geassebarta-ássit.
Ja dat go bohta de dat dan du stárte dan
goaivunmašiidna dá juohke beaivve jurahta
dan.
Ja vaikko dat dal ii leat nu hirbmat garra
jurra go dat lea dan mađe mánga čuohte
mehtera eret, muhto dat jurrá ja jurrá diimmus
nubbái de dan dego orru vuot dego mun
seahkanan.
Livččii miella dahkat bahájjid.
Ja die lea dan du, diet dovda vuot de dan mu
teoriija das ahte gávpogis go lea nu ollu jurra
ja dakkár jienat ahte dat bidjet olbmo miela
veahá dakkár fuones dillái,
de šaddá miella dahkat bahájjid
go mun nu suhtan.
Go mun gárttan guldalit diekkáriid.
Daid juraid.

I have also thought that it's strange that
 there are so many people in the city who
 have gone desperate, those kind of
 people who do bad things
 and can even kill
 other people.
 The sounds, they affect us so much.
 Some people say they like to be in the cities,
 because cities are so alive and there's so much
 life there. Oh, I don't understand that.
 But it's because, of course, I'm used to being
 here in Sápmi where it's so silent.
 Here you can really hear some really quiet
 sounds too.
 In the city, only the loud noises come and go
 through your body.
 Who out there would even hear any of those
 tiny little sounds?
 For example, it's been about fifteen years
 since the worms/larva started to eat our birch
 leaves.
 If someone were to tell me that you are able to
 hear those sounds of the worms that are eating
 the leaves, I wouldn't believe them.
 But then I was standing underneath this tree,
 underneath its branch, and I was listening.
 And it was so amazing to listen to thousands
 and thousands of worms eating those leaves.
 You can actually hear them.
 That was also strangely relaxing.
 But you don't hear that in the city.
 Even if there were lots of worms, I don't think
 anyone would walk around, stand and listen to
 them as they are eating the leaves.
 Here, too, have come the sounds that I
 wouldn't want to hear.
 We have of course neighboring summer
 cabins with visitors.
 And when they come, then you know
 that the excavator will start running
 every day.
 And even if it's not the strongest *jurra* [kind
 of noise] – because they are many hundreds of
 meters away – it goes on and on
 for hours and it feels like I'm going
 insane again. And I get the feeling that it
 would be a relief to do something evil.
 So that's my theory, that in the city
 there's so much noise and these sounds
 that all the time put people in a bad
 state of mind, which makes you
 want to do bad things –
 I get so angry.
 Because I'm forced to listen to these things.
 Those noises.

Diimmus nubbái, oh.
*Muhto de jurddašan daid luonddu jienaide, ii
 dáppe leat gal mihkkige dakkár luonddu
 jienaid maid mun in háliidivčče gullat.
 Dat jienat maid in háliit gullat dat leat dat
 maid olmmoš ráhkada, ja erenoamáš dakkár
 mašiinjienat.*
*Ja, dáppe leat gal dieđus čuoikkat ja borrut ja
 ná, muhto ii dat leat dat jietna mii mu suhtada
 ja váivvida.*
*Dat lea dat go mun dieđan ahte dat farga dat
 čugge mu ja de sakŋida
 vahkku dan maŋŋá.*
*De dat lea dat, manin mun in háliit gullat ja
 oaidnit čuoikkaid.*
*Muhto ii ieš dat jietna, ii dat dienu váivvit, go
 dat lea goitge dakkár de go muhtin láhkai dat
 lea hui čáppa musihkka dalle go mun dieđan
 ahte dat ii mu čugge. Muhto dat lea hui fiinna
 musihkka dat ieš alddis.*
*Ja mun lean oaidnán mo de sávzzat ja
 bohccot láhtejit go dat gullet borru dahje
 “zzzzuuuu” De duon du dat álget julggiid
 loktestaddat dienu “oh uh eh”.*
*Ja duon du vaikko livččii dálvi, na oktii mun
 dahken dan jiena ja sávzzat ledje borramin
 jađe dat álge dalán loktet ja oaivvi álge
 loktestallat julggiid, ja lean oaidnán bohccot
 maid dál go dat borrut jorret diekko birra de
 dat maid loktestit julggiid ja, ja duon du
 šluggájit oaivvi, ahte daidda dat lea issoras
 jietna dat dihtet maiddái justte mii
 dáhpáhuvvá, dat leat čuggehállan ja
 gaskkahuvvon nu máŋgi ja die, diet jienat gal
 duodaid váikkuhit máŋgga láhkai.*
*Dien ge in dieđášii jos in livčče ieš oaidnán
 dalle daid sávzzaid mo dat láhtejedje.*
*Lei nu hearváii dálvit vaikko ii leat ii makkár
 čuro dahje boaru dálvit muhto dat jietnadat
 bijai dat, dat dihtet justte
 mii dat lea dat jietna.*
*Dálvit go mun ledjen ovdamearkka dihtii
 Costa Ricas, de doppe ledje nu olu jienat, daid
 luonddu jienat.*
*Ja, doppe lea dat dihto divri, mun in dieđe,
 dan gaskas, mun in dieđe daid namaid gal
 ledjet muhto dat hirbmas jitnes dat divri ja
 oppa dat meahcci čuodjá dalle go dat lea
 jienas, na dat lei veahá imašlaš dovdu, ja mun
 in dieđe olu lea desibelit muhto orru
 jáhkemeahtun ahte divrris vuolga nu garra
 jietna, ja guldalit dal doppe daid ábegáhttui
 maiddái mat dal doppe huikkašit ja máŋgga
 lágan lottit.*

Hour after hour, ugh!
 But then I think about the sounds of nature.
 And there really isn't any sound in nature that
 I wouldn't want to hear.
 The sounds I don't want to hear are the ones
 that people make, and especially those
 machine sounds.
 Yes, of course we have mosquitoes, flies and
 other insects like that. But it's not necessarily
 their sound that makes me angry and bothered.
 It's because I know what the sound brings the
 bite, that is going to itch for a whole week
 after that.
 So that's why I wouldn't want to hear or see
 mosquitoes.
 But it's not the sound itself bothering me,
 because it sounds somewhat pretty, like a
 beautiful music, when I know it's
 not going to sting me.
 But it's a very beautiful music in itself.
 And I've seen how sheep and reindeer behave
 when they hear this “zzzzuuuu” and get eaten.
 Then, they start lifting their legs up and
 they begin to do like “oh uh eh”.
 And even when it's winter, I once made that
 sound. The sheep were eating and when I
 made this sound they instantly began to lift
 their legs and shake their heads. And I've seen
 that the reindeer too, when getting eaten, they
 stroll in circles and also shake their heads and
 lift their feet. It seems like to them it's this
 terrible kind of sound because they know what
 it carries. Because they have been eaten many
 times and the sound really affect them in more
 than one way.
 I wouldn't have known that if I didn't see with
 my own eyes when the sheep reacted the way
 it did. It was so funny to think it was winter
 and, even if there were no mosquitoes or
 horseflies around, they exactly knew what that
 sound is.
 Last winter I was in Costa Rica. There were so
 many sounds there.
 The sounds of the nature.
 And there was this certain insect there – I
 don't know its name. But it had such a
 powerful sound. And the entire forest would
 resonate when this insect made the sound. It
 was a little strange, I don't know how many
 decibels it was, but it seemed unimaginable
 that such a loud sound would come from this
 tiny insect. And you could listen those
 monkeys that make this persistent yelling. And
 of course also all kinds of birds.

<i>Die lei okta dain buoremus vásáhusain mus</i>	It was one of the best experiences I had in
<i>doppe Costa Ricas.</i>	Costa Rica.
<i>Doppe daid vuvddiiguin.</i>	In those forests.
<i>Mun bere vázzen doppe ja guldalin ja gehččen</i>	I was just walking around, listening and
<i>ja muhto nu lihkolaš.</i>	looking. But I was so happy.
<i>Muhto dat turistat gal leat diedusge doppe</i>	But of course, there too, there are a lot of
<i>maiddái olu.</i>	tourists.
<i>Ja dat bottut go mun sáhtten oktu vázzit doppe</i>	And the moments when I could walk alone
<i>vuovddis, oh dat ledje nu finna bottut.</i>	there in the woods, oh those were such
<i>Muhto de bohtet turistat</i>	beautiful moments. But then come the tourists
<i>ja “bla bla bla bla”.</i>	and “blah blah blah blah”.
<i>Mun in ádde mo olmmoš ii sáhte orustit ja</i>	I don’t understand how people can’t just stop
<i>duođaid guldalit.</i>	and really listen.
<i>Dat gaskaneaset báfájit dušiid hállet ja manin</i>	They were talking and making all of these
<i>dat galget boahtit dohko.</i>	noises in between. Like, why do they have to
<i>Jos dat leat nu olu áššit de manne ii čohkká</i>	come here for that? If they have so much
<i>gosnu baras ja háleš doppe?</i>	to say, why aren’t they sitting in some
<i>Muhto manin dat galget meahccái boahtit</i>	bar and talk there? Why are they coming
<i>suddu bilidit doppe dan finna</i>	here and destroy the beautiful
<i>meahcci jienaid ja.</i>	sounds of the forest?
<i>Muhto dat lea olmmoš diekkár</i>	But such are the people who wants to own
<i>ahte galgá buot oamastit ahte son ieš</i>	everything, and they are just everywhere.
<i>dušše juohke sajis.</i>	It’s very sad.
<i>Dat lea nu váivi.</i>	And I notice that here too.
<i>Ja mun fuobmán dáppe maddái.</i>	Because normally when a Sámi is in the forest,
<i>Dábálaččat go sápmelaš lea meahccis de dat</i>	they will travel quietly.
<i>johtá jaskadit.</i>	They will not scream at others.
<i>Ii dat leat huikkašeamen dohko earáide.</i>	They will speak quietly – when it’s necessary
<i>Dat hállá jaskadit dalle go lea dárbu hállat ja</i>	to speak. And so they walk more quietly as
<i>sáhttá vázzit maid jaskadeabbo ja.</i>	well.
<i>Muhto mun sáhtan gullat kilomehter duohkaid</i>	But then I can hear... from a mile away
<i>ahte “ja-ha, die leat</i>	that, “Ya-ha! There’s a group of
<i>suopmelaččat boahtimin”.</i>	Finns coming.”
<i>Dat lea amas dakkár.</i>	That’s curious.
<i>Manjá iešguđet láganat mii leat, ja man</i>	So many different peoples, and so much
<i>iešguđet láganat mii leat dáppe dán máilmmis.</i>	diversity here, in this world.

APPENDIX III. Blank informed consent form provided to research participants



Participant Consent Form

Project title:

Mapping Sápmi ec(h)osystems. Acoustemologies, sonic relationships and histories of listening from Arctic Europe (working title)

Author:

Nicola Renzi*

Supervisor/s:

Zelda Alice Franceschi (Università di Bologna)* – Domenico Staiti (Università di Bologna)* – Hanna Ellen Guttorm (University of Helsinki)* – Pirjo Kristiina Virtanen (University of Helsinki)*

Institution/s responsible for the research:

Università di Bologna (Italy)* – University of Helsinki (Finland)*

* Contact information below

<i>Please tick the appropriate boxes</i>	Yes	No
Taking Part in the Project		
I have read and understood the project information sheet or the project has been fully explained to me. (If the answer is 'No' please do not proceed until fully aware of what your participation in the project means)		
I have been given the opportunity to ask questions about the project.		
I consent to take part in the project and I understand that taking part in the project will include the participation in interviews, the completion of questionnaires and possible participation in listening activities.		
I understand that all information I provide for this study will be treated confidentially unless otherwise requested and mutually agreed.		
I agree to my interview being audio recorded.		
I agree to my interview being video recorded.		
If I agree to my interview being audio recorded, I give my permission to use agreed parts of the conversation in the non-profit documentary audiobook <i>Sápmi ec(h)osystems. Histories of listening from Arctic Europe</i> (working title), which was fully explained to me as one of the main research outputs of the project.		
I understand that my taking part is voluntary and that I can withdraw from the study at any time.		
I understand that I can withdraw permission to use data within six months after signing this form, in which case the material will be deleted. I do not have to give any reasons for why I no longer want to take part and there will be no adverse consequences if I choose to withdraw.		
I understand that I can access the results of my involvement in the project before the final submission of the doctoral dissertation (31/10/2024).		
I acknowledge that I may request clarification or revisions to ensure accuracy and integrity in the representation of my contributions and experiences. I understand that any requested revisions will be considered and implemented to the best extent possible within the constraints of the research timeline.		
How my information will be used during and after the project		
I understand my personal details will not be revealed to any other people outside the project.		

Name of participant

Signature

Date

Name of Researcher *Nicola Renzi*

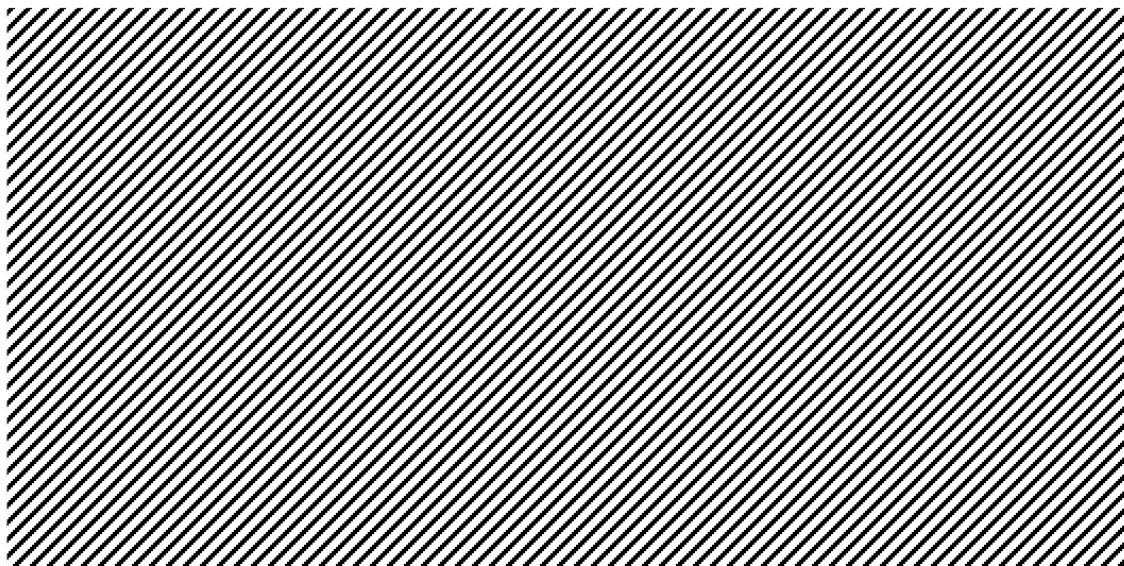
Signature

Date



I understand and agree that extracts from my interview may be quoted in the final dissertation, in conference presentation, published papers, and cultural events. The quotation format will be: Name, Last name, personal communication, date of the interview, place of the interview.		
I agree to my name being cited in the mentioned research outputs.		
I wish my identity to remain anonymous. (This will be done by changing my name and disguising any details of my interview which may reveal my identity or the identity of people I speak about)		
I understand that the recorded files and the data I provide will be stored in a private hard drive until the completion of the project.		
I understand that under freedom of information legalisation I am entitled to access the information I have provided at any time while it is in storage as specified above.		
I give permission for the recorded files and for the data that I provide to be archived in a digital repository or database for future research and learning. (If the answer is 'No' the recorded files will be secured until the completion of the project and completely destroyed afterwards)		
I wish to be consulted if the recorded files are to be published for future research outputs prior their use outside this project.		
I understand that I am free to contact any of the people involved in the research to seek further clarification and information.		
So that the information you provide can be used by the researchers		
I acknowledge that the researchers commit to upholding ethical principles including the protection of Indigenous intellectual property rights, confidentiality, and the cultural integrity of Indigenous Knowledge holders to ensure appropriate attribution.		
I understand that I have the right to clarify and revise any references to Indigenous Knowledge that are associated with my involvement in the research study. The researchers will consider and implement any requested revisions to the best extent possible within the constraints of the research timeline.		

Project contact details for further information:



Name of participant

Signature

Date

Name of Researcher *Nicola Renzi*

Signature

Date

