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How Does the Glacier Speak? Problematising 'Listening', Ecocentrism, and 'Voice' in a Rights of Nature Movement

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Abstract Snæfellsjökul fyrir forseta (SFF) is a Rights of Nature collective originally formed to nominate the glacier Snæfellsjökull as a candidate for Iceland's 2024 presidential election. Here, we reflect on the experiences of listening, in particular to and with a glacier. Although concepts like 'voices of nature' seek to advocate an ecocentric mindset, they assert an implicit anthropocentrism in assuming that entities need to be like humans to be worth listening to. We acknowledge that a glacier does not 'speak' – but it does make sounds, and these sounds carry meanings if there are agents who listen and interpret.

Keywords Listening. Voice. Collaboration. Care. Ethics. Pedagogy. Collective. Ecocentrism. Rights of Nature. Water bodies. Embodiment. Relationality. Artistic research.

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1 Introduction

In March 2024, the collective Snæfellsjökul fyrir forseta (SFF)[1] nominated the glacier Snæfellsjökull[2] for the Icelandic presidential election. As an ad-hoc collective advocating for the Rights of Nature (RoN) in Iceland, SFF self-describes as "community members, ecologically enthusiastic artists, legal eagles, teachers, physical scientists, jöklamús, writers, curators, composers who listen, ecophilosophers, and Arctic foxes".[3] In March 2025, the collective presented a self-critical reflection of their campaign at NYU School of Law's MOTH Festival of Ideas. This paper interrogated "conventionally human-centric political structures, shifting attention from the what (singular political goals) to the how in terms of the possible relational approaches to how politics are performed, exploring the creation of new senses of ontological security in a world of growing polarisation" (Snæfellsjökul fyrir forseta, unpublished). Building on the past year of collective work and our MOTH reflection, our current paper goes deeper into problematising terminology and concepts circulating within European Rights of Nature and environmental activism discourses. We specifically problematise re-presentation (via speaking on behalf of), voice of nature, listening, and the anthropocentrism within ecocentrism, and voice as a way to lean into our ethical discomforts. We elaborate on practices, rituals, and dispositions (attunements) we are cultivating in order to be susceptible and receptive to non-human voices-expressions so we can withness[4] by becoming-with[5] the more-than-human (in our case, the glacier).

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1 Translates from Icelandic to 'Snæfellsjökull for president'.

2 Snæfellsjökull translates to English as Snow's mountain's glacier. Using the International Phonetic Alphabet, it is pronounced ['s(t)nai:ˌfɛlsˌjœ:kʏtl̥].

3 Snæfellsjökul fyrir forseta (s.d.). "About the Collective". *Kjósum Jökul*. `https://www.kjosumjokul.com/about-the-campaign`.

4 Withness is defined as the "art of interdependent relationship" (Rawlings 2024).

5 "Stemming from the Harawavian term 'becoming-with', the transformation of the preposition 'with' into a hyphenated postposition when building new theories from phrasal verbs is an emergent phenomenon within academic discourse. '-with' is often used to indicate more considered, reciprocal, and relational methods of doing research" (Cahoon 2025).

Through the perspectives of relational ontology and cross-cultural collaboration within the collective, we always come back to folklore, existing mythopoetics in the locality of our colleagues, in order to comprehend notions so opposite to the purely objective and only rational perception of the world, to which current legal and social systems adhere. A plurality of voices becomes the main medium presented in this paper, due to the diversity of knowledge that the collective carries. In order to create a transparent, nutrient-rich atmosphere for both ideas and collaboration, we facilitate ethical multi-voiced writing, which is both practiced in this paper and has become a main methodology for SFF collaboration. When co-writing a paper, we allocate time for a weekly talking and writing session; through collective round-table sharing, we discuss different aspects of what we wish to bring up in this paper. Our meetings are subsequently transcribed and used throughout this paper, as a way to combine the voices of the community and co-writers of the paper. We raise ideas,[6] share opinions, and problematise methodologies. After collecting quotations, literature, and assembling plans for this paper, each co-author takes over sections of the paper, where each contributes their area of expertise.

At the heart of the SFF collective are enduring ethical questions of collaboration, representation, and voice. Each collective activity brings up and is affected by these questions, including the act of co-writing a paper. Various disciplines, practices, and beings have assisted us in this task, such as viewing collective writing as an hydrological ecocentric experience and thinking about bodies of water as holders and transmitters/keepers of earthian memory, ancestral knowledge, and other experiences. Our provocation to the status-quo of writing a scholarly article is that we are committed to explore with our whole sensorium the forms in which we are co-creating more-than-human understanding as a becoming-with, writing-with, listening-with, voicing-with, thinking-with, learning and unlearning-with the glacier as an assemblage of networks and agencies that participate in the art and craft of more-than-human communication within the semiosphere. A polyphonia of communication, human and more-than-human, co-create semiotic spaces to converge plural experiential knowledge into collective wisdom.

This paper is co-authored by ten humans.

6 Throughout the many co-writing sessions, team members gathered together to share, witness, and experience what it means to work together in a collaborative fashion. We kept in mind to not be a spokesperson for another being. The questions and discussions have taken place as it pertains to the purposes behind this collaborative paper included: What is a community? What is a home? What does it mean to be human, to be a glacier?

2 Assemblages and Polyvocality

In addition to this assemblage of authors, the glacier and the co-authors/collective also form an assemblage – an assemblage of assemblages, glaciers and humans which are interconnected and overlapping with other assemblages. An assemblage is a relational co-becoming among human and more-than-human entities typically formed through communication or interaction. Assemblages blur lines between individuals and notions of individuality; as Deleuze and Guattari say in *A Thousand Plateaus*, "[t]o reach, not the point where one no longer says I, but the point where it is no longer of any importance whether one says I" (Deleuze, Guattari 1987, 3). As shown by the assemblage of Bawaka Country et al. (2016), an assemblage of knowledge producers – including the land which provides for them the ground of their knowledge production – deems hierarchies nonsensical within assemblages. In fact, the purpose of many assemblages (including Bawaka Country) is to challenge these hierarchies between forms of knowledge, Indigenous and non-Indigenous, human and more-than-human, and the like. As one collective member has reflected: "By being in a community that has so many different types of knowledges that we carry, it becomes, in my head, not anti-system because it is inherently collaborative rather than polarising" (meeting transcript).

The formation of assemblages is non-hierarchical. They are not created, but enacted and maintained through practice as evoked by terms like hydrosphere or more-than-human. With its origins in David Abram's (1996) work, the concept of more-than-human is an alternative to non-human, not human, and other terms which seek to define things, natural entities, and assemblages through the absence of humanity, instead of through a positive framing of difference. More-than-human is an inclusive category that encapsulates both humans and others, without invoking problematic binaries between humans and nature, life and non-life, or Western science and other ways of knowing. Similarly, the concept of the 'hydrosphere' or 'hypersea' seeks to describe the interconnections between the water bodies of Earth and all the water on Earth, whether composed of humans or more-than-humans (Neimanis 2012).

Our usage goes beyond Western scientific notions of the hydrosphere and similar terms which denote the Earth as a separated system from humans which is predictable and manageable to invite the unruliness and interconnectedness of biotic and abiotic water bodies. But that does not mean our choices and actions do not have consequences. The feminist scholar Astrid B. Stensrud (2014, 92) states that there "are different versions of water that practices and technologies help to enact; they are different and yet related as multiple forms". Our assemblage is formed of human, glacial, and other water bodies living

in relation with one another, interrogating such questions as the one posed by Astrida Neimanis in an interview about their work "how might we reconsider what it means – philosophically, ethically, politically – to be a body, when that body is made mostly from waters that also make up the planet […] which bodies are waving, and which bodies are drowning?" (Bright, Neimanis 2018). What is true for water bodies and the hydrosphere is true for all assemblages. They are irrevocably bound up with other assemblages, with consequences for all involved.

2.1 On Problematising

Functioning as an assemblage does bring the challenge of carrying through the de-hierarchised gathering of voices into communication outside the assemblage. In this section, we problematise speaking on behalf of someone – specifically more-than-human entities.[7] Many Indigenous cultures teach or believe that ecological entities are able to self-express or, through local cosmologies, have ancestral links to existing humans. Claiming to speak for them risks repeating the colonial gesture of appropriating the voice of the more-than-human. Having the authority to 'speak for' can enact an erasure of agency for a more-than-human subject.

Problematising does not necessarily seek to provide answers, nor to reject operating within the existing structures that the problematising critiques. Rather, problematising is an exercise of questioning, imagining, and challenging complacency. By following a sense of curiosity regarding a status quo that seemingly cannot or should not be questioned, we imagine worlds different from our own. Similarly, problematising lies at an interesting tension point between moving within existing structures whilst simultaneously questioning them and possibly advocating for their de- or reconstruction.

A genuine decolonial method of environmental interaction, with the aid of other knowledges not previously recognised by dominating Western science, requires relinquishing the authority of speaking for nature and the human exceptionalist belief that humans are the only intelligent sentient beings. As animal rights activist and scholar Eva Meijer writes, "[h]ere, I should also recognize my limitations as a human who is situated in a specific way: I am incapable of speaking for all others, and I do not feel authorized to do so" (Meijer 2025, 40). In

7 As an Indigenous co-writer of this paper pointed out, "It's a very colonial thing to think that we know better or we can speak on behalf of something that is from another culture".

this ecocentric shift, humans stop being the translators, and instead become listeners and participants in an ecology of communication.[8]

Besides problematising our ability to speak for and to listen to/with the glacier, we also want to problematise the very concept of what a glacier is, its distribution in time and space. Both Henri Bergson and Alfred North Whitehead critique the idea that things have simple locations in time and space. This act of spatialisation is what Whitehead calls the "fallacy of misplaced concreteness" (Whitehead 1948, 52). There is a tendency to think of a glacier as being geographically confined to the mass of ice, or to what we see as the white area on a map, but we argue that a glacier, as an assemblage, reaches far beyond this white area and that it consists of much more than the frozen and compressed water crystals. A glacier is also its outlet to rivers and the debris and sediments that flow from it, the local weather patterns created by the change in atmospheric temperature and air pressure around it. It is the effects it has on ecosystems, biodiversity, and culture, from the immediate surroundings to regional and potentially global ocean currents, water levels, and climate.

If we follow Deleuze and define a being, not by its form but by the affects of which it is capable (Deleuze 1988, 124), we see that a glacier affects everything around it and that its limits and borders are not easy to define. If we define bodies as their capacities for affecting and being affected, then we too are part of the glacier and the glacier is part of us. We are mutually entangled in anthropo- and cryological assemblages. Listening-with a glacier is thus also to listen to ourselves. To speak for or with a glacier, by extrapolation, would mean to take seriously our human entanglement with the cryosphere. We might be humans and can never completely escape the anthropocentric perspective, but it is precisely as members of a species that has never existed in a world without glaciers that we need to recognise ourselves as glacial beings; our fate and the fate of glaciers are entangled.

8 The term 'ecology of communication' is discussed in the podcast "The Ecology of Communication: Moving Beyond Polarization in Service of Life" (No. 10) hosted by Nate Hagens. https://www.thegreatsimplification.com/episode/reality-roundtable-10.

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2.2 From Anthropocentrism to Ecocentrism

We also problematise the idea that challenging the anthropocentric perspective necessarily leads to a flat ontology, i.e. a view of the world without distinctions – something posthumanist and new materialist theories have often been accused of. We both acknowledge and cherish the distinctions in the world. Our call for listening to/with and caring for/with glaciers does not stem from an idea that they are like us and thus worthy of the same moral consideration as us. On the contrary, we acknowledge fundamental differences between different types of beings, even if they are entangled, and posit that this difference is key to our ethical perspectives.

The antidote to anthropocentrism is not anthropomorphism.[9] We do not think of the glacier as a human being. That would be an act of ontological violence that ignores the key features that make the other a unique being. As Roberto Marchesini argues, an ethic of sympathy easily slips into anthropomorphism when it relies on identifying with the Other. Thereby, the anthropocentric perspective is implicit in anthropomorphic sympathy as it only attributes moral value to beings when we focus on what they have in common with us. The ethical challenge is in recognising the Other as ontologically distinct and different and thereby a subject of moral consideration in its own distinct way. To Marchesini, the Other-than-me is a next of kin not because we have shared characteristics or interests but because "their traits and characteristics pose a challenge to my conduct" (Marchesini 2025, ix-x).

Rather than identifying with the Other as the antidote to anthropocentrism, we propose a different exercise: dis-identifying with ourselves. By this we mean recognising and truly grasping the Other in ourselves and the more-than-human in each human being. This is based on the established scientific recognition that larger organisms are never composed of cells with just one type of DNA. Complex organisms are symbiotic beings from the inside-out. Our biological development from cell to organism, our bodily functions and processes are all the results of interactions between multitudes of different beings both within the bodies that we call an individual organism and between beings outside the bodily membranes – i.e. interactions in ecosystems and between living organisms and their ostensibly abiotic partners. We are thus always more than human, and we are always acting as more than an individual. As Gilbert, Sapp, and Tauber conclude: "For animals, as well as plants, there have never been individuals. This new paradigm for biology asks

9 We do, however, acknowledge that anthropomorphism is one tool that can be used to form or explore relations.

new questions and seeks new relationships among the different living entities on Earth" (Gilbert, Sapp, Tauber 2012, 336).

The implications of this reach far beyond the field of biological science. To acknowledge that we never act as solitary individuals nor as purely human beings should, when taken seriously, disturb the way we think about philosophy, art, politics, and ethics (Rees, Bosch, Douglas 2018). It calls for a new configuration of academia, research, and political institutions – reshaped to fully incorporate the knowledge that the boundaries between species and even between different spheres, such as atmosphere, geosphere, biosphere, and cryosphere, are obsolete and untenable. Thus, even if we were to start just from our own perspective, when we seriously consider our own being and realise how alien we truly are from what we might at first have thought, we might discover a new-found ability to care for the Other in general. We are multi-entity assemblages, but assemblages are also parts of other assemblages. As Deleuze and Guattari point out, an assemblage is always in the process of passing into something else: "what just a minute ago was a constituted function in the territorial assemblage has become the constituting element of another assemblage" (Deleuze, Guattari 1987, 324).

Rather than conceiving ecological systems as autopoietic, that is, self producing and operationally closed (Maturana, Varela 1980), this paper emphasises relational and co-constitutive processes that unfold across human and more-than-human bodies.

We argue that it is possible to cultivate other modes of being human today, that do not essentialise the imposed sense of separation of the individual self in the world, invoking other kinds of relationships between humans and other-than-human modes of being within the pluriversality (Leitão 2023) of nature. We use the term anthropocentrism side by side with ecocentrism, as a way to describe our current human-centred system of value. With the word anthropocentrism, we specifically refer to what environmental scholars Lissy Goralnik and Michael Paul Nelson call narrow ethical anthropocentrism, which views humans as isolated "sole possessors of intrinsic value". This is different to ontological anthropocentrism, which is an acknowledgement of the limitations of our human perception (Goralnik, Nelson 2012, 145).

We propose to de-centre, to de-embody the dominant narrative of whiteness and anthropocentrism that constrain our relations with nature to an I/it relationship, impairing the biopsychosociospiritual potential for cultivating intimacy with the more-than-human world. A sense of kinship and partnership within the community of life can be fostered and enhanced, based on reciprocity, interdependence, respect, interconnection, and conviviality in the biosphere, and intercommunication for a more-than-human co-evolution within the

semiosphere (Kotov, Kull 2011). We go into further detail on what is meant by the semiosphere in a later chapter.

The worlding of modernity has imposed through many generations a sense of separation between humans and nature, where nature is sensed-measured-listened-to as a conglomerate of potentially useful objects to be optimised for human superiority over the more-than-human world. It has also been pointed out elsewhere that modern languages – especially the languages used by modern colonisation – support a worldview of abstractions, nouns and individuated objects to be used for and disposed of in a power-over paradigm. We must shift the modes of being in which we enact and embody our worlding of the world.

Every becoming is radically different while working towards relational strategies that acknowledge our interconnected and interdependent relations. From an ethical and political perspective, ecocentrism refers to positioning *eco-* at the centre of import for human intentionality and agency. This means any human enterprise must consider and respect the vitality, sustainability, and regeneration of Earth as their living home, hearth, soil, web of life, irreducible to human needs. Thus, we are interested in society-wide transformation that shifts from anthropocentrism to ecocentrism.

2.3 Voice in Relation

We question whether assigning a voice, or the quality of having a voice, to other-than-human beings is a mode of anthropomorphisation. Is a voice an exclusively human quality? Looking into mainstream definitions, different dictionaries seem to disagree. *Cambridge Dictionary*'s definition of voice consists of "sounds that are made when people speak or sing".[10] *Merriam-Webster*'s voice is a bit broader, consisting of "sound produced by vertebrates by means of lungs, larynx, or syrinx".[11]

In general, there is a consensus that voice is tied to the production of sound. In SFF collective discussions, we recognised a shared initial instinct that agrees with this connection. When considering voice side by side with listening, many of us found that we associate voice specifically to sound, more so than listening to ears. It felt easy to imagine listening to include the act of focusing attention towards a broad selection of sensorial inputs. The word listening evoked a

10 See the entry "voice" in the *Cambridge Dictionary*. https://dictionary.cambridge.org/dictionary/english/voice.

11 See the entry "voice" in the *Merriam-Webster Dictionary*. https://www.merriam-webster.com/dictionary/voice.

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relational action. Voice, on the other hand, seems more specific – a means of communication related to sound-making.

This seemingly arbitrary distinction is easily toppled. From an accessibility perspective, if voice is intrinsically linked to sound, is a user or speaker of sign languages voiceless? Voice may be not solely connected with sound but more so the capacity to communicate. We unpack this further in the Ecosemiotics section.

Looking back at the dictionaries, they also do provide less literal definitions such as that of having a voice: "an expression of opinion, or the right to express your opinion/an important quality or opinion that someone expresses, or the person who is able to express it".[12] Interesting here is the specification of having the right, not just the ability, to express an opinion. What then constitutes what is commonly referred to as a voice – possession of language? Production of sounds intended for communication? Ability to communicate? A right to communicate? Who, then, decides who has the right to communicate – the right to voice?

As one might imagine from our unique collaborative process of operating as an assemblage, a key part of the collective is related to listening and sense-making, since ice is not icesolated. Glaciers are not solitary beings but are connected to and forming ecosystems. From an ecocentric perspective, a person is not (solely) an individual but a knot (or an assemblage) in networks and webs of relations. Our bodies are 'multispecies symbiotic assemblages' in constant becoming-with bacteria, fungi, viruses, many forms of water, mucus, blood, smoke, glacier, air, fjords, glacier, moss, *refur*, *krummi*, *jökull*, *tröll*, *álfur*, the oceans, and the magma inside the crust of the earth, to name a few relations. Therefore, when contemplating from this perspective the phenomenon of voice, we begin to see a terrain of relationships and *becoming-with*s of multiple species and more-than human entities. Let's imagine which synergies manifest the voice as an emergent quality of networks and assemblages:

1. A voice requires a physical structure that resonates (minerals, water, bones, tendons, muscles, a lot of blood and nervous fluids).
2. A voice requires a medium to transmit the vibrations generated through the physical structure in the surrounding atmosphere/semiosphere: air, water, ground, ether, and even fire can transmit messages.
3. A voice requires an ecosystem of assemblages that allow complex life to thrive. A voice is an emergent quality of complex forms of life and any form of life is an assemblage of

12 See the entry "voice" in the *Cambridge Dictionary*. https://dictionary.cambridge.org/dictionary/english/voice.

many presences and relationships. A glacier can be seen as a hyper-complex form of life, a monstrous assemblage. What happens if we don't talk about individual voice but present voice-s?

4. A voice requires fire to ignite the pressure that makes the vibrations.
5. A voice requires food to fuel the fire that makes the pressure for the air/water/earth/fire/ether to break through as voice. The voice is a breakthrough, a fugitive line, a howl in the night, a love song for the beloved, a thunderbolt.
6. And then, for our particularity as species, the voice is a becoming-with history, politics, myth, religion, storytelling, language, music, cinema, war and grief, and the more-than-human… always.

For our collective, it is clear that there are not individual voices; each one of us, as transpersonal transcorporeal assemblages, can propitiate the emergence of trans-human voices, expanding our semiotic territory for ingenious and creative communication.

An ecocentric mode of being human in the Anthropocene consists in the conscious and embodied practice of becoming-with, which according to Haraway "is how partners are rendered capable" (2016, 12). This builds on the description of becomings by Eben Kirksey and Stefan Helmreich as "new kinds of relations emerging from nonhierarchical alliances, symbiotic attachments, and the mingling of creative agents" (2010, 546), which captures that these relationships are dynamic, heterogenous, and emergent – much like the concept of assemblages from Gilles Deleuze and Felix Guattari (1987). But Haraway's concept better captures that "becoming is always becoming-with" (2008, 244). From this, Rawlings (2014) created the Icelandic verb *að jökla* (to become-with glacier) to acknowledge and propitiate the collective practices of listening-with, walking-with, grieving-with, celebrating-with, and more-with the glacier. Through a practice of *að jökla*, SFF explores the relationalities that shape our scientific and artistic inquiries. Our ontology shifts to becoming-with in transcorporeality as sympoietic assemblages. Communication transforms and expands towards a withnessing that enriches and complements cognitively, spiritually, and ethically the listening-to that today's technologies enable.

2.4 Listening to and with

"If a tree falls in a forest and nobody is around to hear it…". This old adage calls attention to the fact that sounds are not merely vibrations in the air. Sound and, in particular, voice are relational semiotic processes that also require a recipient – someone who receives, listens and interprets. Thus, a redefinition of voice leads to considerations on listening. Listening is about events; it is temporal and processual, unlike sight which can give the impression of permanence. Acoustic ecology foregrounds theorising auditory attunement and methods for listening to soundscapes. When the soundscapes are treated as stable objects, the act of listening risks becoming something to be captured and represented rather than a situated practice of attending and moving with an environment (Ingold 2007). It furthermore becomes important not to collapse ecological sounds solely into anthropomorphised categories of voice or communication without considering the listener's situatedness.

Glaciers generate acoustic events such as cracking, melting, and calving, which are material and physical phenomena rather than intentional acts of meaning-making. These sounds do not necessarily constitute communication in themselves, nor do they carry messages that are deliberately addressed to a listener. Meaning does not reside in the sonic event as such but emerges through practices of situated and relational listening. Shifting attention from what is perceived, to how it is lived, makes ordinarily unnoticed dimensions of experience available, which is precisely, where listening becomes sense-making rather than mere reception (Petitmengin 2006).

Drawing on Steven Feld's concept of 'acoustemology', sound is understood here as a way of knowing that arises through embodied engagement with place, rather than through the transmission of linguistic or symbolic information (Feld, Basso 1996). Listening, in this sense, is not the passive reception of sound, but an active and context-dependent process in which attention, experience, and interpretation play a central role. What is heard, becomes meaningful only in relation to the listener's position, practices, and modes of attunement.

This approach helps to avoid equating sound with voice and, in doing so, limits anthropomorphic objections that would frame glaciers as speaking subjects. It also resonates with David Abram's insistence that the more-than-human world does not speak in human linguistic terms, even as it remains present through sensorial, affective, and material encounters that call for perceptual responsiveness rather than translation into language (1996, 76). Treating sound as non-linguistic yet meaningful supports an ecocentric orientation in which glaciers participate in perceptual and semiotic processes without being positioned as communicative agents or representatives.

Lutz Stautner's short film *Crying Glacier* (2025) documents Ludwig Berger's soundscape recordings of an Alpine glacier. Of his field research, Berger comments,

> Every time I drop the microphones in its melting waters or against its ice, I feel this bodily connection. […] I like to see these sounds that I'm recording as a form of language and so for me these are stories the glacier is telling. […] Through the idea of voice, we could also see it more as a kind of person. In German, there's the word – *stimm(e)rechte* – which means the right of the voice which means the right to vote. So I think a glacier should also have that right? It should have a voice in the discussion. It could drastically change our way of perceiving the world.[13]

Here, we note the field-recorder finding his attunement through the action of 'listening to' the glacier.[14] He connects with his own sensate body and reflects on the potential of glacial sounds as linguistic, as cryospheric storytelling. He further reflects on voice and rights in his mother tongue to arrive at his conclusion that a glacier, too, could have the right to vote. Berger's suppositions arose through his intimate practice of listening to. Through Berger's example, we propose that an auditory-based listening to the glacier through analog or electronically augmented modes may offer one form of sensorial attunement that can lead to listening-with.

'Listening-with' positions listening as a shared situation in which meaning emerges through reciprocal presence rather than transmission. This shift from listening to toward listening-with can be understood as a transformation in the quality of attention rather than as a conceptual distinction. Sustained listening practices widen attention beyond selective extraction and premature interpretation; in that sense, "listening in every possible way to everything possible" becomes an ethic of presence, rather than a technique of capture (Oliveros 2010, 129).

This reciprocity, also depends on how attention is modulated: an open, receptive mode can allow atmospheres, rhythms, movements, and sound to 'touch' the listener, dissolving the neat boundary between observer and landscape without collapsing difference (Petitmengin 2021). 'Listening-with', therefore, becomes an action of interrelation, which suspends the assumption of authority by one of the subjects,

13 *Crying Glacier* (2025), 05′35″. https://emergencemagazine.org/film/crying-glacier/.

14 In Iceland, numerous field-recording practitioners and composers – including Konstantine Vlasis, Magnús Bergsson, Katie Paterson, and Kaśka Paluch – have situated listening to (and audio-recording) glaciers as ways to practice more-than-human attunement.

expertise or hierarchy in a relationship between non-entities, but processes of becoming. This co-orientation aligns with the collective's shift from listening-to to listening-with, co-sensing as a multisensory transcorporeal practice. From unidirectional to collaborative, we deliberately avoid 'speaking-for', supporting the ecocentric practice by positioning glaciers and humans, humans and glaciers as co-participants in the semiosphere rather than communicative opposites. Instead of privileging human cognition, 'listening-with' acknowledges that humans and nonhumans, be they glaciers, waters, flora or fauna, contribute differently but most importantly meaningfully to the environment.

Native Sciences and TEK speak on inter-relating with nature, where communication with more-than-human is possible through full-body sensorial experience: "Language must once again be understood as the body-based vehicle that refers to the animate landscape, which first gave rise to its expression" (Cajete 2000, 17-18). According to Cajete, the expression of environment is presented through movement, wind, birdsong, colour and smell. Comprehension of such language happens through skin, intuition, time, patterns, and more usual senses. Most importantly, such practice creates an environment of care, where surroundings stop being a backdrop to human existence, but an active participant and a teacher.[15]

Listening-with becomes an action of interrelation, which steps away from the assumption of authority by one of the subjects, expertise or hierarchy in a relationship between entities. Instead of privileging human cognition, listening-with acknowledges that humans and non-humans – be they glaciers, waters, flora, or fauna – contribute differently but most importantly meaningfully to the ecology of sensing. With this in mind, listening-with becomes a multi-sensorial practice. Attuning to the rhythm of the glacier melt and slow temporalities of glacial movement requires embodied listening.

15 Robin Wall Kimmerer, Potawatomi botanist, explored the gathering ritual of the Honourable Harvest as an embodied practice. "This kind of listening may involve many different kinds of perception. It might include the strictly empirical observation of whether the population (plants) is large and healthy enough to support harvest… often entail intuitive understanding about whether the plant is or is not willing to share itself" (2018, 33-4).

3 Ecosemiotics: Communication, Signification, and the Question of Glacial Meaning

At stake in discussions of listening to or with glaciers is a fundamental question about the nature of environmental meaning-making. Ecosemiotics, the study of sign processes in relation to natural environments, provides theoretical tools for clarifying what occurs when humans engage perceptually with more-than-human entities (Nöth 2001, 72). The distinction between communication and signification lies at the heart of ecosemiotic theory and proves crucial for understanding how glaciers produce meaningful signs without producing messages.

3.1 Communication Versus Signification

Winfried Nöth distinguishes between two modes of semiosis that are often conflated in environmental discourse. Communication, he explains, "occurs not only among humans, but also between all other organisms throughout the whole biosphere" and is "defined as a sign process which involves a sender and a receiver" (2001, 72). Signification, by contrast, "concerns sign processes without a sender" and "predominates in ecosemiotics, where organisms interact with a natural environment that does not function as the intentional emitter of messages to the interpreting organism" (72).

This theoretical distinction resonates with questions that arose in collective discussions. As one member articulated: "ascertaining whether or not a geo[se]miotics might be possible, first and foremost, raising the question of what are the… what kinds of vehicles or vessels would… a glacier's communication engage" (meeting transcript). The collective's uncertainty about whether to speak of glacial communication reflects an intuition that glaciers do not send messages the way organisms do. Yet this does not mean glaciers are semiotically inert. Rather, they engage in signification. They produce signs through their material processes that become meaningful to interpreting agents.

The question of "sensorial materials that help to communicate… meaning-making, their semiotics" points toward what ecosemiotics theorises as environmental semiosis. When the collective asks "what are the sensorial materials that might be… carrying the… meaning making" in relation to glaciers (meeting transcript), they are identifying the physical substrates through which glacial signification occurs. These substrates include sounds, visual changes, tactile sensations, and thermal properties. These are not arbitrary symbols chosen by an intentional sender but what Peirce (1932) called indices, signs that bear direct physical connections to their referents. As

Peirce explained, an index "refers to the Object that it denotes by virtue of being really affected by that Object" (1932, § 248).

3.2 The Semiosphere and Environmental Signs

Jesper Hoffmeyer's concept of the semiosphere provides a framework for understanding how glacial signs exist within a broader sphere of sign activity. The semiosphere, Hoffmeyer (1997) explains, is "a sphere like the atmosphere, the hydrosphere or the biosphere. It penetrates these spheres and consists in communication: sounds, odours, movements, colours, electric fields, waves of any kind, chemical signals, touches etc." (quoted in Bruni 2001, 296). Critically, the semiosphere encompasses both cultural and natural sign processes, both intentional communication and non-intentional signification.

The collective's experience with Konstantine Vlasis's recordings of air bubbles inside the glacier illustrates the defamiliarizing encounter with glacial semiotics: "when Konstantine played for us the sound of air bubbles popping and moving inside of a glacier… it blew my mind. It's like, what, this is not even possible. Like this kind of a sound, I had no idea… sounds like tropical birds, sounds like tree frogs, but it was just like, that's… just defamiliarisation" (meeting transcript). This moment reveals how glacial sign production operates independently of human expectations. The sounds are real acoustic phenomena, indices of physical processes occurring within the ice, but they were unexpected, unfamiliar, outside the cultural models through which we typically imagine glaciers.

This defamiliarization, however, is followed by potential familiarization: "the act of listening… at least in me I thought I knew what a glacier would sound like… listening might have that kind of… capacity to defamiliarise, but then the more that you get into practice of listening [it can] breed a certain kind of familiarity, which may or may not lend to a kind of intimacy… and maybe even affective relationship with the glacier" (meeting transcript). From an ecosemiotic perspective, this describes the cultivation of interpretive competence. It describes learning to attend to environmental signs, developing perceptual attunement to glacial semiosis. As Nöth explains, "the way humans interpret their natural environment is determined by models developed in cultural history" (2001, 72), but engagement with actual environmental signs can modify those cultural models.

3.3 Umwelt and the Limits of Shared Worlds

Jakob von Uexküll's concept of Umwelt, the species-specific experienced world constructed through an organism's particular sensory and interpretive capacities, further clarifies what is at stake in claims about listening to glaciers. Each organism inhabits its own perceptual universe. A tick's Umwelt differs radically from a human's, just as both differ from that of other species (von Uexküll 1992). But what of a glacier? Can we meaningfully speak of a glacial Umwelt?

The collective's discussions around preconditions of perception touch on this question. One member described how Sami practitioners "can feel the energy of the place, and they can sometimes feel the energy pushing them out, or embracing them, welcoming them", noting that "many individuals of the same community with the same habits develop this kind of perception" (meeting transcript). This points to human perceptual capacities cultivated through practice, the development of human Umwelt in relation to environmental phenomena. The subsequent question, "is it impossible for us to listen to the glacier or to listen to nature because of [our] conditions of life?", prompted proposals for "intervention on our perception... embodied practices to tune in" (meeting transcript).

From an ecosemiotic standpoint, these proposals recognise that human perception is not fixed but can be cultivated, that our Umwelt can be expanded or modified through practice. However, this expansion operates within human perceptual limits. We cannot access a glacial Umwelt because glaciers do not possess the sensory apparatuses and nervous systems that construct an Umwelt in the biological sense. As Hoffmeyer notes, "higher complexity […] made it possible to develop a more sophisticated sensory apparatus and corresponding nervous system which would enable animals to form fine-tuned internal impressions of what lay round about them (the subjective experience of the world, the Umwelt)" (1997, 33).

This does not mean glaciers are semiotically irrelevant. Rather, it clarifies that glacial semiosis operates through physical-material processes rather than through perception and interpretation. The glacier produces signs through its geological and thermodynamic processes. These signs include acoustic emissions, visual changes, and thermal variations. These signs exist in the semiosphere and become available to organisms, including humans, with appropriate sensory capacities to perceive them. Our Umwelten intersect with glacial processes at these points of potential perception, but we do not share an Umwelt with the glacier.

3.4 Indigenous Contributions: Relationality and Embodied Responsiveness

Ecosemiotics, as developed primarily within European intellectual traditions, offers powerful conceptual tools for understanding environmental sign processes, yet Indigenous knowledge systems provide essential contributions that expand and enrich this theory. The Yolñu understanding of Country from northern Australia, as articulated by Bawaka Country et al., demonstrates how Indigenous frameworks theorise environmental communication through concepts that complement Western ecosemiotics. When Yolñu women attend to messages sent by the *gukguk* (pigeon) signaling time to dig for *ganguri* (yams), they practice environmental attentiveness that recognises both the material basis of signs and the relational responsibilities that flow from interpreting those signs (Bawaka Country et al. 2016, 462). Significantly, this framework does not centre human interpretation. The *gukguk* "may be calling to humans, or maybe not" (463), as the *miyapunu* (turtle), crabs, and gum trees also attend and respond to environmental signs.

The concept of gurrutu, the Yolñu kinship system, provides a framework for understanding how environmental sign processes are embedded within ethical relationships. Gurrutu establishes that "Everything has gurrutu. The land, the animals" (463), and critically, whales "have their own gurrutu beyond humans" with "their own law, their own relationships, their own language" (463). This shows how sign processes connect to obligations of care and response. Yolñu epistemology emphasises embodied responsiveness: when Nanukala is bitten by ants while digging, "Nanukala's skin is taken into the ant. The ant's secretions come into her arm" (467), illustrating material participation in sign processes rather than distant observation. As the authors emphasise, "It is not enough to attend to the messages, to know the ants, to listen to the sand's language. Yolñu must also respond, and respond with care" (467).

These Indigenous contributions demonstrate how sign processes are embedded within ethical and relational systems. They extend ecosemiotic theory beyond observation to include material participation and responsibility. For understanding glacial semiosis, these insights suggest that listening to or with glaciers involves not only perceptual attentiveness but also recognition of the relational and ethical dimensions of interpretation.

3.5 Glacial Natures in the Semiosphere

Kalevi Kull's concept of "different natures in the semiosphere" (1998) provides a crucial theoretical resource for understanding how glacial signs differ from biological or cultural signs without being reduced to purely mechanical processes. Kull proposes that nature is not monolithic but consists of 'zero nature' (purely physical processes), 'first nature' (living organisms), 'second nature' (culturally modified environments), and 'third nature' (cultural artifacts and representations). Each 'nature' involves different modes of sign production and interpretation.

Glaciers occupy an ambiguous position in this schema. As geological formations, they might seem to belong to zero nature, purely physical, non-semiotic. Yet glaciers are not simply rocks. They are dynamic, responsive to environmental conditions, undergoing constant transformation. They produce what we might call proto-semiotic phenomena. These are physical processes that, while not constituting intentional communication or biological semiosis, nonetheless generate perceptible signs that carry information about environmental conditions.

The collective's discussion about whether "listening to the glacier [is] 100% possible" reflects this ambiguity. One response affirmed: "I think listening to the glaciers is 100% possible. I think it's what people do" (meeting transcript). From an ecosemiotic perspective, this is accurate if we understand listening to as attending to the signs the glacier produces through its material processes, an interpretive practice that does not require the glacier to be an intentional sender. The distinction between listening to and listening-with becomes important here. The phrase listening-with might suggest a shared communicative space, a dialogue, whereas listening to can describe interpretive attention to signification.

3.6 Sensorial Materials and Indexical Signs

The collective's attention to sensorial materials aligns with ecosemiotics' focus on the material substrates of sign processes. The observation that "most languages in the world have sensorial materials that help to communicate their meaning-making… most languages have written forms… visual, most languages have an auditory, spoken… and most languages have something that is just… movement based" (meeting transcript) prompts the question: what are the sensorial materials through which glacial meaning-making occurs?

Ecosemiotics would identify these as primarily indexical signs in Peirce's semiotics. Peirce defines an index as a sign "which refers to

the Object that it denotes by virtue of being really affected by that Object" (Peirce 1932, § 248). The crack of ice adjusting to pressure is an index of stress distribution within the glacier. The sound of air bubbles releasing is an index of ancient atmospheric conditions trapped in ice. Meltwater flow is an index of thermal dynamics. Visual observations of calving events are indices of glacial mass balance. These are not symbols, which depend on convention, or icons, which depend on resemblance, but indices. These are signs whose meaning derives from their causal or physical connection to what they signify.

When humans taste glacial meltwater, feel the cold radiating from ice, hear sounds emanating from within the glacier, they are perceiving indexical signs produced by glacial processes. The meaning these signs carry, about climate conditions, glacial dynamics, environmental change, requires human interpretation, but the signs themselves exist independently of human presence. This is what we mean by saying that the semiotics are emergent properties that also require agents who listen and interpret, agents who find and make meanings in the semiosphere/audiosphere. The glacier produces signs through its existence and processes. Humans interpret these signs through culturally-mediated perceptual and cognitive frameworks.

3.7 The Implications of Voice and the Semiosphere for Rights of Nature

Because of these preconceived perceptual frameworks, the human agents interpreting these signs must also be careful. For example, ideas such as 'the voice of nature' have often been anthropomorphised according to the desires or ends of the human interpreter in ways that go beyond or harm the 'nature' they presume to speak for. In this way, to listen to the voice of nature is not to listen to the voice of nature, but rather to listen to the voice of a human who presupposes knowledge of what nature needs. But nature is itself an amorphous, too-generalising concept. If something as straightforward as a dictionary definition can't agree on what a voice is (does voice belong to people, or any vertebrate with a larynx?), how can anyone then know what an amorphous, too-generalising concept (a.k.a. nature) needs, let alone re-present those nonspecific needs to other humans? The voice and the nature of the voice of nature have veered far beyond their initial relational poetry. The non-human signified was left behind long ago. In its place, a human who humans.

The problem with not problematising, and possibly defining the voice of nature, is that it opens up the possibility for humans to have yet another way to act in self interest, under the guise of being a voice for nature. The increasing amount of more-than-human beings

gaining legal personhood creates prosecutory obligations which literal (human) voices have conventionally been expected to litigate. Promoting his latest book *Is a River Alive?*, nature writer Robert Macfarlane enthused about the 2008 Ecuadorean constitutional enshrinement of the Rights of Nature: "This perhaps really sharpens the radicalism of it, to empower any citizen to bring a case on behalf of the living world, to give voice to, if they feel that the rights of a river have been violated".[16] On a practical level, many rights of nature initiatives rely on human spokespersons to implement those legal obligations. We problematise this necessity of a human spokesperson.

The innovation of legal personhood is not that other-than-human entities are given a literal voice, or a platform to advocate for themselves. It is that they are classified as rights-bearing peers, providing humans with a basis through which to legally defend them. This is no less radical or important, but it is different to more-than-human beings being listened to directly – not necessarily an end goal of this exercise to reimagine relations. In the abovementioned talk, Macfarlane posed questions to highlight the importance of questioning and defining what we really mean by *a* voice of, or giving voice to:

> What does it mean to give voice to rivers? Ontologically, philosophically? What does water want? And how would we know if we thought we did […] How are we not just human actors jockeying for position in a pseudo-ventriloquism of the more-than-human world? How do we avoid a cosplay animism? Where does a river or sea begin or end as a rights-bearing entity or a legal person?[17]

Macfarlane's questions precede our ultimate preoccupation – how the more-than-human can participate fully within Western legal frameworks, without the necessity of a human proxy or voice.

How could this apply to abiotic beings, such as glaciers? What constitutes the voice of a being that is also an assembly of beings? Glaciers flow, crack, pluck, shrink, quake, melt – all output which can be listened to, sensed, or tuned-in-towards. Does any of this constitute a voice?

In our earlier section On Problematising, we looked to Deleuze's definition of a being through its affects instead of form. Similarly, Deleuzian scholar Liza A. Mazzei applies Deleuze and Guattari's

16 "Is a River Alive? With Robert Macfarlane", 0:35′37″. https://www.youtube.com/watch?v=ky4rN7WJBYU.

17 "Is a River Alive? With Robert Macfarlane", 0:24′01″. https://www.youtube.com/watch?v=ky4rN7WJBYU.

Body without Organs concept to voice, developing the idea of a Voice without Organs.

> What kind of voice, what kind of being can be thought once voice no longer is present, emanating from a unique, essentialist subject conscious to itself? This voice, no longer that of the bounded organism, no longer of *the* or *a* body, is what I have named elsewhere a Voice without Organs (VwO) that enables one to think voice differently. (Mazzei 2016, 154)

This hostless voice seems to appropriately encompass the voice of an assemblage of beings. With this definition in mind, the voice of a glacier could include voices of different humans, *Yareta* cushions and other plants, meltwater and mountains can be voices with glaciers, not "separate and individual but only within the entanglement it immediately becomes and continues to become as it joins other enactments, other assemblages, and other times" (Mazzei 2016, 155).

This polyvocal understanding has important implications for how we conceptualise Rights of Nature frameworks. When environmental discourse frames nature as "having a voice" or "speaking", it typically relies on a communicative model, implying intentional senders and messages. Ecosemiotics reveals this as anthropomorphic projection. The glacier does not speak to us. It does not send messages. It does not engage in communication as organisms do. However, recognizing that glaciers engage in signification rather than communication does not diminish their ethical or legal standing. On the contrary, it provides a more accurate account of how environmental entities produce meaningful signs without requiring them to be like humans. The glacier's semiotics, its sign-producing processes, are real, consequential, and available to human interpretation. They provide the basis for what Maran describes as ecosemiotics' dual focus: "both the representations of nature in culture and nature in its own semiotic activity" (2007, 280).

From this perspective, advocating for glacial rights does not require claiming the glacier communicates with us. It requires recognizing that sustained attention to glacial semiosis, to the environmental signs produced through glacial processes, can and should shape human values, decisions, and legal frameworks. This is what the collective explores through practices of "listening/sensing/embodying the more-than-human" (abstract). This is not reception of messages but interpretive engagement with environmental signification, acknowledging both the glacier's independence from human meaning-making and its availability to human interpretation.

4 Conclusion

Water is ritual; it is origin, memory, and vital cycle. It reflects the health of nature and stands as the minimum condition for life. Water is never static or temporary – it transforms, adapts, and persists, even as human negligence distorts its rhythms. We humans recognise bodies of water, from a well functioning cell and a single drop of dew to the glacier, the river and the whale, dynamic assemblages in the hydrosphere, bodies that are in constant embodiment and de-embodiment as water flows through keeping life alive. Water already implies millions of drops shapeshifting through form and temperature, inseparable and interdependent. Life cannot be sustained by an isolated drop but through the continuous collaboration of countless drops flowing together. To understand water is to recognise this collective impulse – something far beyond the anthropocentric gaze of a faucet.

Figure 1 SFF co-authors read the article aloud for Snæfellsjökull. This occurred 25 January 2026 in the cave Sönghellir at the foot of the glacier. Photo by Snæfellsjökul fyrir forseta

While critically problematising already existing terms and concepts, we have been constantly thinking-with the collective, through regular online meetings, transpersonal transcorporeal interactions, and metapoetic engagement with the glacier as a semiotic territory, witnessing an emergence of opportunities for responsible and ethical carrying of our inquiries with humility and relational rigor. Writing this paper gave us the opportunity to consider how Snæfellsjökull is (or might be) a co-author or a peer reviewer. If we are glacial beings, both part of but in proximity to the glacier, how can we acknowledge and involve the glacier as a way to further understand a glacier's semiotics? We devised a preliminary peer-review practice where

we read the paper aloud to the glacier and notated the sensorial information we received within the margins of the paper **[fig. 1]**. This method opened up inquiry into the confluence and distinction of individual, collective, and ecosystem. The wellbeing of our relationships and interdependence with the pluriversality of the planet requires unconventional approaches to co-existence.

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