

BENEATH MY FEET, HOT WATER RISES

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The following contribution is based on short diary entries and photographs produced during a one-month residency in Reykjavik at SIM Residency.¹ I later edited, amended and formatted them into this exposition.

I have been interested in the relationship between the concept of home, its object culture, ideology, and politics for a long time. However, my journey of exploring the connections between body heat, energy, and home started with my diagnosis of and battle with anorexia, the loss of body weight and the consequent constant feeling of coldness. This prompted my research into the industrialisation of home, energy, and food production through the concept of body heat. I have been approaching this question by the measurement of the Calorie, used in the context of both heating and food production to measure the heat or consumable energy of a given material.²

I travelled to Iceland to continue this research in a new context and environment, where water is heated by the depth of the earth—rather than by burning hydrocarbons—and explore a new kind of relationship between energy and the human body. My research method usually synthesises personal and social aspects, utilising first-hand encounters and more analytical research of written sources, including archival materials, to form a narrative where individual experience is situated in the broader social context. I wandered and explored several geothermal sites and infrastructures in and around Reykjavik to acquire first-hand experience of the sites and workings of the central heating and energy production of the city. After the first encounter with Icelandic weather, I decided to concentrate on and anchor

1 I was an artist in residence as part of the cross-residency between SIM Residency and Budapest Gallery's artist exchange program.

2 To get more insight into this research, read the transcript of my lecture performance titled *People Long for Warmth* in the following link: <https://www.researchcatalogue.net/shared/d8f3f5d11209f-b300e8a021073da672c>

the research in bodily experiences. To capture the interplay between the body and nature, heat and the energy of geothermal water and my body, I chose to do photography and write poetic diary entries. All photographs in this exposition were shot on-site³ and the diary entries written during my time in Iceland. The combination of these media allowed me to tell a personal narrative of body heat and energy situated in this place where the immense energy from beneath is directly perceivable.



Fig. 1.: Untitled, pipeline near the Nesjavallavirkjun geothermal power plant, digital photograph, 2024

3 The last picture in the essay is the only exception. It is a montage of a photograph shot on-site and another one shot in my studio space at Seljavgur.

A FRAGILE BODY ARRIVES AT A MIGHTY ISLAND

My plane departed from Budapest at 8:30 pm, heading west into the sunset. Following our ascent over the cloud barrier, the sun had shined constantly until we arrived at Keflavik⁴ at 10:30 pm local time. After landing, there was still a surprising amount of light; one of the passengers, a mother, warned her kids to wear their jackets; it is only 4° Celsius outside, she said. I was still sitting in my seat, wearing only a pullover, thinking about the fatal mistake I had made in packing my leather jacket instead of the winter one.

When I looked out the window in the morning, the sun was up and shining, and only the unnatural movement of the lamp post in the street reminded me of the insane wind and consequent cold outside. When I finally went out, I shivered, my nose turned into a miniature iceberg, and my hand didn't seem to have the dexterity to insert the key into the door lock.

I longed to see some seals; I love their squishiness and their large, soft, and round bodies. Why do I hate the same qualities in myself? If I were a seal, I would definitely bear the cold better. They usually chill on a particular beach at Korpulstadir, or so I heard; unfortunately, they were nowhere to be found when I looked for them; it was only much later that I caught a glimpse of one of them out in the ocean, confidently swimming in the cold.

THE SEARCH FOR WARMTH

I stood in the shower while shivering, frantically operating the tap while cold water fell in the tray. It turned out there was no hot water in the building that morning. I have been going to the hot water tanks and following the pipelines just outside the city to hunt for the missing hot water. The city of Reykjavik acquires its energy and heating from geothermal water extracted from boreholes; pipes run from these sites to the storage tanks in the city.⁵ As I strolled along them,

4 Keflavik is an international airport near and serving Reykjavik.

5 There are multiple hot water tanks in the city. I started my walk from the one in Grafarholti and along the pipeline to the Físfelag Reykjavíkur airport.

there were no apparent signs of hot water. I put my palm on the pipe's metal shell, but I sensed nothing, only the blinding shine of the metal piping in the midday sun.

I touched the surface of a pathway, hoping for a clear, detectable sensation of warmth, a sign that beneath my feet, just a couple of inches deep, hot water flowed. I didn't



Fig. 2.: Untitled, in the thermal foot bath at Seltjarness, digital photograph, 2024

feel anything, so I got up abruptly and started walking while feeling ashamed of my childish excitement. Nevertheless, I continued to trace the path of the former main hot water conduit, built in the late 1930s and early 40s to transport the warm waters of Mosfellssveit to the heart of the city;⁶ it was the main lifeline of the city like the artery of the human body. I should tell you that it's not so remarkable today, and you would need to specifically search for it to find the slightly narrower concrete pathway travelling from the water tanks through the outskirts. After my failed attempt to sense it, I tried to imagine being inside the pipe, being the water, flowing confidently from the wells to people's homes, radiating heat along the way. My heat would be infinite, fed by the depth of the earth.

Summer has arrived, or so it seems; as I sat in the hot water pool under the radiant sun,⁷ I eventually felt warmth filling my body. I am thinking about the laws of thermodynamics. In the thermal pool, the water temperature is approximately 38 degrees Celsius, and my body heat is around 36 degrees Celsius; the warmer substance, therefore, must give its heat to the colder one, in that case, to my body, to achieve equilibrium. Slowly but surely, we will become one.

⁶ The first experiments started at the beginning of the 30s, by 1938 only 50 residential houses were connected to the central heating system. The pipeline was completed by 1943. (Melsted 2019)

⁷ The municipality of Reykjavik operates 8 outdoor pools located around the city that could be used for a modest price. ("Swimming Pools", n. d.) I frequented the Vesturbæjarlaug pool during my stay. Icelanders practice an active bath culture because of the cold and unforgiving weather. It was made possible by the widespread adoption of geothermal energy and the city's modernisation from the 1930s. From the second half of the century, the pool became one of the most important locations of social life. (Jónsson 2010)



Fig. 3.: Untitled, signage beside the hot water tanks at Öskjuhlíð Hill, digital photograph, 2024

THE POWER OF THE DEPTH

The walk up to the hot stream thermal river⁸ reminded me that I still hadn't fully recovered from being underweight; the walk was only six kilometres from the bus stop, but hiking up the hill still tired me easily; I imagined once again being the hot thermal water pushed from deep underneath by my inner energy—to the surface, up to the hill, into the stream, then finally being rested, flowing slowly between the rocks to the valley, gaining more and more momentum and energy, enough even to carve out the stones.



Fig. 4.: Untitled, release valve near Hveragerði, digital photograph, 2024

- 8 The Reykjadalur Hot Spring Thermal River is located approximately 50 km southeast of Reykjavik near the small town of Hveragerði. It is unique, as the thermal water flows directly to a hot water spring up on the hill.



Fig. 5.: Untitled, borehole and pipes near Nesjavallavir geothermal power plant, digital photograph, 2024

As I came closer and closer, more and more steam became visible in front of the scenery, gently rising upward and then being caught by the wind and dispersed in the air. After arriving, I walked to the geothermal area's pipes and chimneys.⁹ The wells looked calm from afar, but on closer inspection they seemed energetic, almost violent. The steam was ejected with force from the chimneys, looking like the high-pressure cooking pots my grandma used to have; I remember how frightening were the spinning, whistling relief valves and the stories of these pots blown apart by pressure, spilling boiling water and metal shards onto the cooks.¹⁰ The sound is deep here, more crackling than the pot's high-pitched whistle and strangely soothing like an old steam locomotive, but this steam has been coming out constantly, probably for hundreds of years, without any apparent effort. I hope this ancient pressure cooker doesn't explode now.

⁹ Nesjavallavir geothermal power plant

¹⁰ I heard many anecdotes as a kid; searching for evidence there are many studies detailing accidents or possible causes.



Fig. 6.: Untitled, calcification from the piping near Nesjavallavirkjun geothermal power plant, digital photograph, 2024

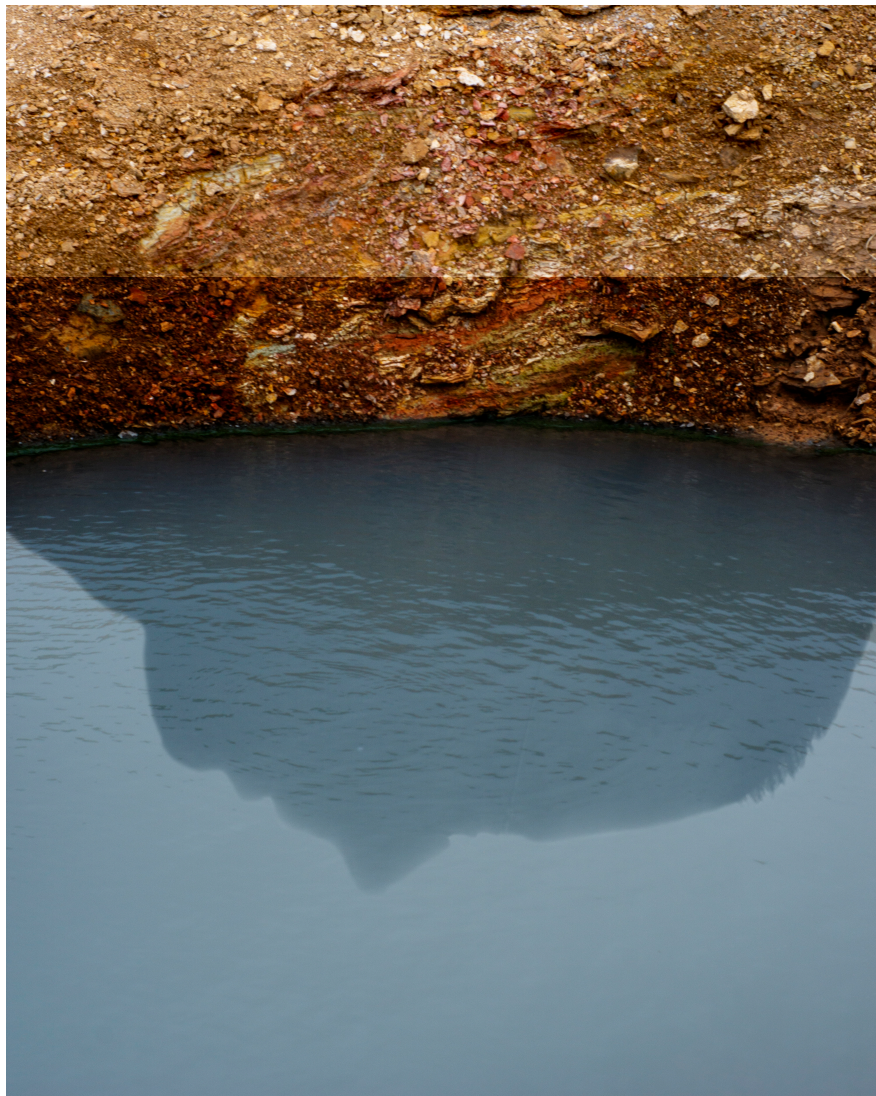


Fig. 7: Untitled, at Reykjadalur Hot Spring Thermal River, digital montage, 2024

¹¹ Geothermal water is highly mineralised. These minerals could precipitate when the temperature drops. The resulting calcification could also damage the geothermal infrastructure. (Jamero, Zarrouk, and Mroczek 2018)

At first, I didn't catch it, but as I stood on the rocks, a deep trembling, a low humming became increasingly perceivable; it was not just the sound but the resonance that came from the earth through my feet up to my head. The sensation got stronger and stronger with an ever louder sound as we approached a working borehole with its operating release chimney. The steam had blown out the pipe with such force that the calcification from the pipes¹¹ flew meters away; it was a curious formation, thin with a bubbly white surface on one side and a greenish copper blue on the other. (Fig. 6) While just hours earlier its elements had been part of the hot water and steam erupting with immense force from the depth of the earth, it was strangely fragile and lifeless now.

WATER IN ALL FORMS

Waves are breaking on the shore, with their distinctive repetitive sound, while rain starts to pour over my head in large drops. Behind me, steam slowly rises to the sky. My body is finally warm, almost too hot, floating in the Krossneslaug thermal pool,¹² at the end of the road, on the ocean's shore. Water is everywhere in Iceland. Wherever you go, there are streams, rivers, waterfalls, the occasional—at least in the summer—snowy spots, and the thermal water rising from the deep below.

The wind blows strongly on the top of the former hot water tanks of the Öskjuhlíð hill.¹³ Probably I had chosen the wrong day to come up here, I took all my photography gear with me, just to realise I had left the SD card at home, I misjudged the direction, and upon arrival, it started raining.

¹² Nesjavallavir geothermal power plant

¹³ Hot water tanks were established on the Öskjuhlíð hill connected to the main hot water conduit to store the incoming hot water. In 1991 mayor Davíð Oddsson built a revolving restaurant on top of the tanks, and later on, in 2007 Natural History moved into the decommissioned tanks and the place got its new name "Perlan", the pearl. (Gunnarson 2017)

Life would be different as a hot water tank. I wouldn't move anywhere, and although the wind would constantly blow around my metal shell, the heat of the water inside would keep me warm. The human body is composed of 60%—somewhat—hot water. If I work hard, maybe I can become a hot water tank too.¹⁴

DEPARTURE FROM THE LAND OF IMMENSE ENERGY

Buses in Reykjavik are quite unreliable.¹⁵ They come and go as they desire. I anxiously wait for one to take me to the terminal. Ten minutes go by, and then 20, I decide to go on foot, with all my bags, pulling my trunk behind me like a stubborn dog. Sweat drops from my nose as I arrive at the terminal after 30 minutes; apparently this land not only has tremendous energy, but it also requires you to put in your own as well.

I wake up shivering, my head pressed onto the aeroplane's tiny window. It is a strange twilight outside, with just a slim outline of the rising sun as we head southeast into the continent. I open my thermos to sip some of the overpriced tea I bought at Reykjavik airport. It is warming me slightly from the inside; I try to restrain myself from consuming it at once. I want to keep it as long as possible; it is the final dose of warmth I took from the island.

¹⁴ There is a long tradition in modernity of conceptualising the human body as a machine or the sum of industrial processes. I am particularly interested in my research of the work of science communicator Dr Fritz Kahn, whose illustrations depicting the human body as industrial processes were widely popular in the 20s and 30s of the previous century. (Sappol 2017)

¹⁵ I could only base this on my relatively short stay. However, anecdotes heard from locals convinced me that public transport in the city is quite unreliable.

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