
Daily Research:

A Burial History of Exhaustion

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↓ It is an oddly shaped rock wrapped in tinfoil and twine, then enclosed in orange wax. Hiding for years on the dark shelves in a corner of the core sample storage warehouse, a fine layer of dust testifies that no human hands have touched it for a long time. Moist pebbles are trapped inside the skin-like layer of wax. At a glimpse of the eye, the core sample looks like a piece of meat at a butcher's shop.

↓ I am lying on the cold concrete floor. I let my fingers run across the wax and grab it firmly with my left hand. It is a grasp quite unlike that of touching another person, yet doubtlessly with some kind of hopeful intensity, probably akin to that of handling a talisman or another magical object. I focus on the hard surface of the rock in an attempt to regain my balance and fend off the burst of nausea that hit me just minutes ago. I imagine its impenetrable, rocky core and mentally induce its steadiness into my own dissident guts. On the upper left side of my head I feel this hot vibrating sensation, like a trace left on the inside of my skull, shaped by the blow of a city bus mirror. A strange itch, perhaps resembling the feeling of having a phantom limb—a place which you cannot scratch.

↓ I practice becoming still as a rock. I freeze my limbs flat against the floor. I force my eyes still, freeze the movement of the images flowing by behind the eyelids, like a film coming to a clean stop in the midst of a rolling motion. I picture one single monolithic core sample hovering in dark space. It is pristine like “The Blue Marble,” the last picture taken by human hands of the earth from space. This will help. I stop breathing, and hear the blood raging louder past my eardrums. The tense pull of my eyes seem to slowly dissolve. When I open my eyes I am able to focus once again on a still point at the ceiling. Earlier that day the neurologist had asked me to walk up and down the floor in a straight line. Then he asked me to follow the movement of his fingers. Left to right and back. From center to periphery. He pinched my arms as he asked me to remember three things: a house, a tree and a car. While lying on the crisp hospital bed the fear of forgetting those three words cultivated a hard rock in my stomach. That day it felt like something in my field of vision had shifted, as if the world as I saw it had been transformed into a magic-eye image, where you have to defocus your eyes to see the hidden new shapes emerge.

↓ It could be that the feel of the orange peel texture of the wax covering the core sample, while resting my concussed head on the cold concrete floor, was the beginning of my obsession with the man-made earthquakes in Groningen. Its resemblance with an oversized pork chop, the strange skin-like feel of the wax, and the heaviness making appearance and consistence not quite add up, this was perhaps what caught my attention. Or maybe it was later, when I looked back at the footage I shot that day of the rows upon rows of archived core samples, shaky and blurry, as if an internal earthquake had affected my arms while shooting, as if this new strange blurring of my vision had infected the recording-instrument in my hand. The coincidence of encountering the phenomenon of man-made earthquakes at this moment of sensory disorientation seemed significant, as if seeing the exhaustion of the earth as a larger narrative into which the sensory exhaustion of my own body fit like a piece of a puzzle. I will try to introduce you to the scene:

↓ *Then came the volcanoes that erupted in black masses of lava that consumed everything with their glowing tongues. Then came the ice sheets that molded the earth like modeling clay. Then the forces of time moved tectonic plates into slow and rapid collisions. Then came the large bodies of water, then the sun dried them out and left a delicate icing of salt across the crust of the earth. So. Slow.*

Man-made earthquakes? Such a strange, poetic constellation of words. Writing poetically about this however, is akin to the guilty pleasure of photographing oil spills for their colorful iridescent surface. I am aware.

↓ The new chemistry of the air makes the rays of the sunset glow in unexpected ways. Peat reserves can burn underground throughout winter, when the bog is hidden under a layer of ice. When the ice melts and a breath of oxygen reappears in the spring the fire starts roaring again. The shock of becoming geological has long worn off, or perhaps it was never really there. The shock moved with the slowness of an ice sheet.

I have set up an old orange canvas tent at the back of an unused isle of shelves, where I can spread out and do Daily Research.

* * *

↓ Daily Research:

↓ DR is the process of firmly and rigorously taming the sensory exhaustion of perceiving the world as it unfolds. The nausea of looking at letters, screens, driving, biking, drawing, walking fast, talking at length to people, all this requires the same kind of steady and slow discipline as that of taming a traumatized horse. It too did not sense the speed with which the bus approached, and now it snorts heavily with diluted nostrils and foamy mouth. DR is a scratching. A careful examination of the threads of events interwoven through movement (vibration). If I exercise becoming still as a rock I feel the difference recorded by my body, like fossilized traces of pre-historic critters on a sandstone

surface. DR is an archive of simple practices intended to keep track of these recordings. I tell myself that the earthquake came for a reason. It will inscribe a new kind of sensory attunement into my body that will help amplify minute graduations of change. Drying off the hot white foam, noticing the trembling muscles and the flickering gaze. It *will* be a matter of survival.

↓ A yellow note enclosed in the wax of the core sample states that it is Slochteren Sandstone, taken in the town by the same name in the 1950s. It is carrying deeply desirable information about the earth, of dreams about unexplored treasures hidden just below our feet. The triumphant circumvention of the impenetrability of the surface of the earth. Perhaps it was even the sample that would determine the first drilling for gas in Slochteren more than 60 years ago. As I hold the sample in my hand I feel a subtle vibration. The tremors are ever so soft, at the threshold of perception—phantom vibrations or poltergeist vibrations, which make me question my own state of mind. I remember a quote by William Burroughs in the essay about the practice of Do Easy—*Every object you touch is alive with your life and your will* (Borroughs 1979: 60). But elsewhere in the same essay he states that objects might jump out and stump against your toe or slam against your knuckle, so I guess it's not as simple as that.

↓ Before the companies started drilling into the earth they took mile-long biopsies of the subsurface. These biopsies were meticulously examined by equipment so accurate that it could predict the day-to-day growth of a cancerous tumor. The size of the grains of sand was noted, and through a microscope they turned into fist-sized gems. When the right constellation of sedimentary rock was found they cheered. A law was passed that all samples taken in the country should be stored in the Core Sample Storage Warehouse. They are brought to the warehouse in carefully wrapped plastic canisters, where they find their final resting place inside one of the layers of storage shelves. Some rocks are black with glistening white arteries, some damp and dusty, several stored in old and mouldy wooden boxes. Salt cores are leaking with moisture, perforating the brittle cloth enclosing them with patterns of crystals.

↓ The keeper of the core sample warehouse handles the long cylindrical canisters with delicate precision, but without particular affection. He has let me set up shop in the back of the long corridors, overbearingly tolerating my newfound obsession. Like a good archivist he knows the shelves in the deep of the warehouse like the palm of his hand, and he patiently pulls out every mouldy wooden box I point at. His movements are precise, and seem to be reduced to the bare minimum of effort. He moves with ease, and a surprising strength for his small figure, when he pulls out the long boxes full of resin-enclosed Limburg sandstone. Secretly I wonder if he feels the dead presence of the rock samples too closely, and if blasting loud talk radio from his office is a way of muting their silence. Apart from the daily management of the core samples coming in and out from the field, he is also in charge of an impressive collection of succulents that reach their bony branches towards the ceiling. We stay largely uninterested in each other's Daily Research, both hiding behind the clear corners of the neatly organized storage shelves.

↓ I am moving along the rows of storage shelves in the far end of the left corridor in the core sample warehouse. My field of vision shoots like an arrow towards the deep dark in the end of the corridor. In rifle shooting it is called the fate line: the piercing, penetrating, deadly gaze. Try wider, softer. Helping my gaze with my two index fingers at the periphery of each eye I shift my gaze outwards as much as possible. This exercise is one of the small hidden gems of deconstructing the preconditioned sensory arrangements of the body. As I move deeper towards the darkness I notice the rows of storage shelves moving with the waves of my gait. A slight shift of attention and the whole world becomes animate with a hidden movement. At the end of the rows in the darkness sits my orange tent. I keep records of these exercises in the margins of newspaper cut-outs.

↓ *After 2 unsuccessful attempts, the Slochteren 1 well drilled deeper and further. On 22 July 1959 they discovered a gas pocket in the Lower Permian sands, which proved worthy of commercial interest. There was little rejoicing – they had been looking for oil in the Upper Permian Zechstein. Only when two other drills also found large gas reservoirs, approximately at the same depth, they realized the significance of these discoveries: The*

huge 2.8 trillion cubic meter gas field in the porous Rotliegend formation, which spans from the United Kingdom across the Northern Sea to western Germany. It was now perceived that it was the discovery of a super-giant.

↓ And just like that, material 263 million years of age is folded into the present, reversing the speed with which tropical forest matter was folded into the aeolian dunes of the Variscan age.

Burial History: Unlike human burials, which are often swift and procedural, burial history of ancient organic matter is an ultra-slow folding process of decomposition into sedimentary layers. It is continuous across millennia as the earth moves and overlaps like dough being kneaded, over time-spans too great to understand. As I move along the rows of storage shelves, noting them carefully through each corner of my eyes, I imagine the entire warehouse as sedimentary layers of knowledge about the subsurface of the earth. The slowness of moving through the exercise brings new details of the archive to the fore, such as the texture of the light as it is absorbed by dark wooden boxes, or reflected by brightly yellow storage units, or the sharp smell of mould mixing with the chemical smell of resin.

The speed at which that ancient buried matter is excavated is orchestrated through the rapid developments of new extraction methods. The Groningen Gas Field is praised for the emergence of new revolutionizing methods for tapping the resources with even greater efficiency, allocating the bounty, like pioneers tapping syrup from maple trees.

↓ Time seems to be lost inside the warehouse. Is it fall? The keeper eyes my daily exercises with poorly hidden amusement while he goes about his manual registering and archiving of new-coming core samples. Clearly the smell of moldy storage boxes does not make him dizzy. In the office he shows me a large plastic tray, where different cut-outs of a long sample show the sedimentary layering of the subsurface in the Rotliegend Formation. The rocks are beautiful like gemstones, nestled into a shiny resin bed. He points at the pinkish sandy

lumps of rock in the middle. “The best reservoirs for gas are found in the fine-grained aeolian dune sands,” he says. “The rock formation where the gas is found today has desert origin, with sand dunes and wadis formed by rivers. The oscillation between wet and dry sands across millennia resulted in deposits of mudstones and halite.” His finger dances across the uneven dark lines that run through the rock, animating the sharp cuts and soft waves frozen in the material.

↓ “The rock records profound changes in climate, vegetation and sedimentary processes. Each core sample is a natural archive in itself,” he says. I picture Russian dolls uncovering new shapes inside each other. Rock hard egg shells being smashed with a pickaxe, to reveal yet another shimmering shell underneath. The collections of natural archives inside this large man-made archive which is the core sample warehouse. “It is possible to read the traces of time within the layers,” the keeper says. “Here the oceans rose and dried out again. This event left the layer of salt that acts as a seal for the gas formed by the decomposing tropical vegetation in the sand dunes below. This is the awesome work time has orchestrated for us to harvest the precious gasses now heating our houses and boiling our water.” His eyes are shining with the excitement of specialized knowledge.

I picture large fields of prehistoric ferns and bright red berries decomposing as they are folded into an alien dune landscape with inexplicable slowness. How they make space for themselves inside these folds, and how their exhales of methane gas mould pockets pressing lightly against the salt layer of the Zechstein. The time-spans that are instrumental to geological formations are beyond human perception. The rock exposes these rhythms in comprehensible patterns of strata. I recall a visit to a quarry in Germany in the early fall. My geologist friend pointed to the stripes along the stone wall of the quarry hovering above us. “Here changes in the tides are recorded! What this rock shows is the waxing and waning of the moon.” I was looking at the large drill holes into the rock. They hinted at the rock’s not-so distant future: It would eventually also be chopped into sizable blocks of sandstone used for buildings. Dinosaur-looking digging machines stood dormant around a deep pit of green water, and the scent

of decomposing fall leaves somehow made this millennial process slightly more tangible.

↓ The Rotliegend Formation, better known as the Groningen Gas Field, has yielded earth gas since the 1950s. It whistles through long manufactured straws, perforating the salt layer shield. Within a few years after the discovery of the gas, pipes grew out of the region and spread into the rest of the country, and soon after across Europe and even North Africa. The gas not immediately used was pumped back into the natural reservoirs deep below the Zechstein seal, dormant until needed again.

The keeper forms his hands in the air. He gestures the shapes of gas reservoirs. Pulsating movements, like palpitating hearts, pushing air out from inside the palms. When the gas reservoirs are empty they deflate like rock balloons and send tremors across the surface of the earth. His usual demeanor of professional reservedness seems somewhat deflated too. His movements now emanate a tired precision, like that of a worn out craftsman that shaped hard metals for decades, or perhaps a tarot reader that knows too much.

↓ I am getting asthmatic from staying in the core sample warehouse and the nausea is not improving. While the architecture of the core sample warehouse previously reminded me of the sediments of the earth it now feels like a damp labyrinth. The warehouse is never quiet. There is an incessant hum from the fluorescent tubes and the climate control system that seem to vibrate my eardrums. I spend days just focusing and defocusing my eyes at a far away point, out of touch with what I came for. The keeper takes pity on me and offers to take me to the gas fields to pick up some core samples, and we take his pickup truck up north. When we reach the field the keeper has aged several decades. He is frailer and milder, more distinguished. I never noticed the mustache and the impressive bushy eyebrows until now (but I might still be unable to properly focus). Neither his black crooked cane, as if it had just grown out of him. As we stand on the grounds of the extraction plant he knocks lightly on the massive metal canister filled with earth gas. It looks like a fat, lazy caterpillar spreading

its legs out on the dusty ground. “Reality is not independent of our explorations of it.” His movements are now slow and strained, his arthritic joints creaking. “A chance blow of a pickaxe, and see where we are today. A swollen body, extended in all its hybrid forms, with joints, pipes, gears and wires, and the soul still remains what it’s always been—too small to fill this body, too weak to guide it.” His voice sounds as old as a century.

↓ I look across the plant, to the other side of the barb-wired fence. A figure climbs up a small ladder, takes a camera in front of his face, and snaps a quick series of images of the gas plant. Quickly he steps down and puts the ladder back into the trunk of his car and drives away. “There is a deep mistrust of the industries and the government in this area,” the keeper says. “You will find that people have installed their own seismometers in their houses. These people are feeling a great anxiety”. His eyes are a piercing green. “You might remember the traces of life fossilized in the slab of resin-enclosed sandstone....” His voice disappears as a gush of wind sweeps through the plant.

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↓ I rent a car to spend some time in the small town where the gas was first found, some 60 years ago. Slochteren is a calm place, with a light that is beautifully broken by mist of the damp soil. A retired couple, Geja and Rijn, take me in without reservations, and I stay in their grandchildren’s bedroom. During the day I drive around to look at the various gas plants. They are closed off with tall barb-wire fences, looking serious with their intricate webs of shiny metal pipes on the lush green fields. I climb a hill along the highway to get a closer look at the monument raised where the gas was first found. It is a large monstrosity made from hard iridescent polyester. It is shaped like the methane gas molecule, and the shiny greenish surface reflects the headlights of the cars and trucks racing by. A bloated amusement fair ride, ready to hurl bodies ecstatically around its own axis. A monument to the earthquakes would take on a much subtler character. Like parasites or algae it would infiltrate old existing monuments, such as the medieval church in Huizinge that is now adorned with

deep cracks in its massive brick walls. Maybe it would just be a memory of a tremor in the body. One day I see a swarm of orange workers moving swiftly and cautiously around the plant. There is a sense of panic in the air. Later Geja says that there was a leak in the pipes and gas had been released into the air for most of the day. Had I felt a change in the chemistry of the air that I had been breathing?

↓ Florence is Geja's friend. She lives in a grand and stylish villa off the main road. She has a bit of an old-world kind of glamour, and speaks to me in perfect, yet slightly formal, Danish. "The experience of earthquakes is a deep primordial rumbling inside the gut—an elastic expansion and contraction of intestines, or cramps of the uterus," she says. She looks at me alluding to a kind of woman-to-woman secret of the effect of flooring menstrual cramps. I can't help but imagine her delicate figure trembling.

↓ Through vibrating waves the digestive tract becomes connected to the drilling head exploring and perforating the substrata, breaking open new reservoirs. Gas slips up to the surface, emptying these pockets inside the earth. The sinking of the earth above sends ripples through the layers of strata. This energy accumulated across millennia gains magnitude and power as sound waves ripple through the earth. The ripples penetrate any kind of matter - bricks, church walls, dikes, garden paths and human organs. The magnitude of an earthquake is archived as different intensities felt as vibration inside the gut. An embodied library of earthquakes.

↓ Did you know that the province is sinking? It happens with a pace that can only be measured with satellite equipment over decades. Perhaps the region will have to adjust to a wholly new ecology in 100 years. An ecology of a crater, closer to the core of the earth, or perhaps it will return to its pre-historic existence of ocean sea-bed.

↓ At night I am reading an article. The companies use skilled lawyers and professional negotiators as strategies to exhaust the people claiming refunds for

the damage done to their property or the loss of market value. One woman tells about her anxiety, as she picks up pieces of ceiling that have come down in her daughters' bedrooms. "The soul is too small for the monstrous hybrid body created by technologies of extraction," the keeper said. It creates a void in our minds and our culture, not unlike the precarious voids in the underground, ready to collapse at any moment. The people in Groningen are also caught in a kind of void. A void which is created by the gas, but manifested as finance.

↓ Some people in the Groningen gas fields wake up before an earthquake is felt. They cannot explain exactly why, but they believe it might be because of some extremely fine-tuned sensitivity to the pressure waves preceding the vibrations. Not unlike birds flying low before a storm, or the dolphins beaching themselves before a tsunami. The dolphins in Japan cause an immediate wave of anxiety among the human population, evoking memories of destruction to come. They lie helpless on the beach, drying out in the sun, aware of their own act of defiance.

↓ In the Netherlands almost every inch of the subsurface has undergone a careful and meticulous examination. Three-dimensional models have been crafted to reflect the data extracted from the millions of probes into the ground, and the unbearable thought of the impenetrable secrets of the earth below is systematically and rigorously eliminated. The jarring of the deflations happening several kilometers under the gas plants echoes in the bones of people, as they are pulled from their sleep into waking.

This jarring affords a sensory adjustment. An adjustment to living inside this man-made geology.

↓ Rijn recounts when the government and industry still did not recognize that the earthquakes were indeed induced by the drilling for gas. Later the companies were forced to admit the consequences of their drilling, but the extraction of gas was too important for the economy to discontinue. As the earthquakes became more frequent and heavier, and old houses started collapsing, a cap was put on

the amount of gas extraction allowed. But the possibility for earthquakes will be there well into the future, as the heaviness of the earth pushes down on the emptied-out gas reservoirs.

↓ It is unknown at what magnitude future earthquakes will be. No matter how many probes, how many 3D models constructed, and how much data collected, a full survey of the earth below its crust is still unavailable to humans.

Rijn is one of those who claim to wake up before an earthquake is felt. As he drives me around the area, to proudly show the work he used to do in the region during his years as a civil engineer, he stops at an old school. "Here the children are making earthquake alert exercises," he says. They are instructed to hide under the tables at the first sensation of an earthquake." I recall the account of a friend from Japan: If you live within an earthquake zone a subconscious anticipation of the next earthquake is always with you. The body attuned to the vibrations it has learned entail danger.

↓ At dusk I go for a walk along the main road in Slochteren. I pass multiple signs promising legal help for earthquake related damages, and a few houses reinforced with wood structures. I see black cracks running down the side of a large white historic building. A sudden flooring nausea hits me, which blurs my vision and makes my head heavy as a rock. I lay down on the grass, on the lawn of an abandoned villa, trespassing the warning signs of danger due to earthquake damages on the fence. I am trying to get my body as close to the ground as possible. The body is our first instrument, which can be adjusted like a weight out of tilt. I continue my old practice of becoming rock, to one of becoming seismometer. With all 10 fingers stuck into the ground, and the right ear pressed deep into the soil I wait for an earthquake to happen, ready to register it in my body. Hours go by but nothing happens. As the dew falls I give up. I feel like an imposter in this landscape, unable to attune to the changes that inhabit it. The sensory exhaustion of living with the earthquakes is permeated with the anticipation of earthquakes as much as it is with their presence, and to record these changes means registering both sides of this. It is the exhaustion

fuelled by a dread for that one big earthquake, the one breaking the records for what was previously assumed to be the upper threshold.

↓ It is the exhaustion that attunes the body. Its potential lies in the “fine-tuning” of the body, a fine-tuning so accurate that the boundary between felt and anticipated vibration begins to blur. A body-instrument so finely tuned that perception plays a trick on itself and feels the cracks inside the earth minutes before it happens.

↓ Johan lives in an old farmhouse at the end of a winding unpaved road, which doesn't show up on Google Maps. The sounds of the landscape are uncrowded, making each one stand out. Well-fed, prize worthy chickens shriek as he throws a load of grains at them. The well shrieks too, as he hauls water from the underground. He shows me the cracks in his house that haven't been fixed yet. There is a large crack in the red brick wall at the base of the house, which looks like failed attempts at burning ceramics. “A hurricane suddenly emerges from a clear sky and swoosh, shakes the entire house so bricks and mortar is crackling and windows are shivering,” Johan gestures, with his arms flowing above his head. He grabs the iron on the stove and rattles it back and forth. He does the same thing with the TV set. The sound breaks the pristine silence.

↓ The earthquakes are shallow and therefore they cause significant damage to the houses built on the soft clay soil. Upstairs Johan has a shelf full of binders containing email correspondences with the companies' lawyers. “These binders are overflowing with all my sleepless nights,” he says.

↓ Geja lives close to the main road going through the town. In her ears, the crash of an earthquake can be mistaken for a big truck unloading stone boulders outside her house. She meticulously writes down every earthquake in a journal. I ask her to add what they sound like. Other people hear the falling of chairs from the second floor, or slamming of doors.

↓ Geja's brother used to play drums. He tells me his dreams of making a score based on the decades of earthquake events, where every minute represents a year. He says the sound of drum beats condensing the earthquakes into a percussion symphony will make people attentive to the earthquakes. The minute of 2014 would be like a thunderstorm of hands beating the drum skin. A year of sonic events condensed into one minute? His eyes are shining at the thought of it. If you sit still and listen to the sounds around you, how many of them do you think you perceive as what they actually are?

↓ Still nauseous from the exertion of the walk I lay down to do an online meditation practice in the bedroom of Geja's grandchildren. The instructor asks me to classify sounds starting with the one furthest away, going closer and closer until I end up at my own breath. The exercise is a practice of precisely cataloguing the layers of sound that exist around me, constantly changing and re-positioning with the movements of my body. In the end, he instructor asks me to listen to my heart. As I lay there trying my best to listen to the beats of my heart I wonder if the presence of man-made earthquakes could create a finer attunement to sound. If this attunement would even be passed down to the next generation, then the population living with earthquakes can evolve into more sensitive beings, aware of the possibility of volatile change imposed by a man-made ecology.

↓ The earthquake today was the magnitude of a chair falling in the attic, while the one last week was more like a breeze going through a crystal glass cabinet.

↓ The long core samples are still lying where I left them in the warehouse, stored in their wooden boxes like dull pencils. Seeing their orderly alignment again I feel lost. I sift through the databank on the Dutch Meteorological Institute's website, trying to make sense of all the numbers, graphs and curves. An online data tool allows me to choose a specific earthquake in time and space. I choose a pattern of accelerometer positions on the map and download the data. The data is not vibrations, but numbers that plot a waveform on an XY axis. The Y axis is annotated as Time (s) and the X is Offset (km). Along the space in between fine

blue lines create a graphic representation of one earthquake as sensed through different accelerometers across the landscape. The blue graphs show the movement of the waves emitted by the earthquake as they pass through the earth. This should be daily research, but it's so awfully hard to concentrate. I attempt to respect the solemn accuracy of the data streams, but I get distracted by their resemblance to layers of vertical mountain landscapes. Ice peaks and valleys dramatically sweep across the field, creating a body of voluminous blue bursts that dissolve into dripping icicles along the perforated horizontal line.

↓ There was an earthquake while I was in Slochteren, but I didn't feel it. I look at the list of data that the seismometers have picked up across the province, irritated at their precise sensitivity. The seismometer acts like extended ears dangling deep in shafts dug into the earth. These mechanical ears pick up every little vibration of the earth, and they transfer them into data points along a wave form on the screen. The data shows no signs of anxiety. The seismometers don't pass judgement on the origin of the source, which can be a natural as well as a man-made earthquake, or something completely different, like a jet plane breaking the sound wall above ground.

↓ "The void is created by consuming reserves of past time in order to run the monstrous body of the present." The keeper emerges from his office. He now looks more like a ghost, wearing an oversized dark coat and a felt hat. He points to a large poster, showing the layered strata of the Groningen Gas Field and the empty holes that illustrate the gas reservoirs. "Energy is never only extracted from the ground. It is also extracted from our bodies. It manifests through sensory exhaustion from bodies having to continually adapt to volatile and rapid changes within the environment. The void is created in humans because they have not evolved to perceive these rhythms of past times that pass through ours." His hand sweeps slowly across the illustrated strata on the poster. I sit quietly anticipating his next monologue. "The void can only be filled through a realization of this relationship: The tapping of the earth's energy, and the mutual exhaustion of our bodies are connected, even if the exhaustion shows itself through other aspects of our lives." With the purposeful, slow movements of a

soothsayer he hovers his hands across a pair of fine-grained cores of gravel on the large display table. “We have consumed so much past time, fossilized into reserves of oil, gas and coal buried deep in the ground, that it is now impossible to feel grounded in the present. We have entered into an addiction with past time preserved as fossils, and that is clouding our connection with the future.” [1]

↓ As an act of useful procrastination I browse around, reading about the peat industry in The Netherlands. The development of the peat industry carried prosperity to the country from the 1100s onwards, and around 1530 the accessible peat bogs were completely exhausted. This resulted in new technologies, such as the “baggerbeugel,” a dredging net on a long pole, that could be used to mine the harder-to-reach peat below water. The muddy peat had to be spread along the narrow strips of land that had not been eroded by the peat digging itself, and the workers pressed the water out by stamping on it with boards tied to their clogs. Today this industry is inscribed into the land, leaving large areas of the country looking like broad-toothed combs or land-sized Swiss cheese. The digging escalated into unmanageable proportions as entire villages were at risk of eroding away into the water.

Peat is the accumulation of partially decayed organic matter, and like the core samples peat is a natural archive. A fossilized record of changes over time, which manifests in vegetation, pollen, spores, animals, and archaeological remains found in the bog. Peat is the first step in the geological formation of other fossil fuels such as coal and gas. Working in the peat fields was hard and precarious labor, the archivist informs me. Peat workers stood in cold water bending over to dig out heavy mud for 16 hours a day, six days a week during season. The exhaustive work often led to illness and death, and usually the whole family had to participate in order to make ends meet. The families lived in temporary “plaggenhutten,” self-built seasonal huts made from sods. The ground which they stood on was rented out to the peat workers by their employer, which imposed strict rules upon the renters (such as no peat digging on their own plot of land).

How does one archive experience? Will I have to immerse myself in the cold muddy water of the peat bogs to understand the exhaustion of the peat workers? I feel overwhelmed by looking at the cool blue lines of data, and shut the browser down.

↓ Archives are material accumulations that help us think beyond our own lifespan. They help us notice of how we and the world around us change. Natural archives have origin in a desire to categorize the entire natural world into neatly annotated boxes and binders. This desire emerged with the exploration and exploitation of land under the colonial era. It is the desire to tame and utilize the vast bounty of nature. Victorian botanists nailed butterflies to cork boards. They would name them after elaborate classification systems, because if you could name them you could own them.

↓ The archive behind the zoological museum in Copenhagen comes to mind. I visited it in the winter with my father, and a charismatic young man in military boots took us on the tour of the collection. I had brought a 3D scanner and wanted to capture the most spectacular specimen. A strong stench of whale bones being cleaned in formaldehyde made the air almost unbearable to breathe, so distracting that my 3D scans came out completely perforated with holes, making the animals look like horrible cases of chemical deformation. Along the beautiful dark wood vitrines thousands of taxidermy animals looked out with beady glass eyes. A male bison had been rolled out on its little trolley legs, and was standing like a sad and gigantic ghost, its brown mane shredding pieces on the floor.

↓ And then the egg collection. Oh my! Like a hungry crocodile I wanted to consume them all, as they lay there like sugar coated chocolates in colorful cotton beds. An incredibly alive-looking owl frozen in mid flight was eying the eggs too. His glass eyes were wise and ominous.

↓ Of course the archive shows only one end of the story. Today we know how many species have gone extinct, exactly because we named them.

↓ I sift through the footage I shot at a demonstration at a gas plant in Delft. Young anarchists are meeting up with mostly elderly locals who have been affected by the earthquakes. A guy in a black hoodie is blasting Rammstein from a large boom box and the many homemade signs are hovering in the wind. The diverse group battles the wind as they tie a 20-metre large banner to the barbed-wire fence. In large black letters it reads, "Together we are shutting the gas valve." I meet a lady with a bright green hat with the words "Groninger Bodem Beweging" (Groninger Ground Movement) written across the cap. She tells me about her small personal acts of activism. She frequently emails the companies with far-fetched requests, such as if they could provide her with a life-vest and a lifeboat. She lives close to the dikes and her argument is, that if they burst because of earthquakes she would surely need a lifeboat. The company's lawyers will then spend weeks constructing an argument as to why they are not responsible for buying her the requested lifeboat. She also has an unexpected alliance with the local bank, calculating their losses incurred as property value drops below the mortgage loans for the houses in the area, trying to advocate within the structures of the financial system. We are sitting on the dyke eating soup, watching the wind tear at the large banner.

↓ Attunement etymologically means to bring into a harmonious or responsive relationship. Attuning one's body (in a harmonious way) to a world of man-made earthquakes seems like a daunting task. The lady in the green hat is working "in spite of" it all. Her actions are like tiny pebbles in the shoes of those who have the means to drill in the underground near the dykes by her house.

↓ The phantom itch in the left side of my head, implanted by the blow of the city bus mirror, has somehow extended into my upper left torso, sometimes making anything I do unbearable. How do I describe this itch that somehow seems to exist inside my soft interior? It has the memory of previous itches on the surface of my skin, but somehow deeper and more encompassing of three-dimensional tissue inside the body. To distract myself from this itch I cannot scratch, I am watching a film about the legendary Tendai monks of Mount Hiei. They engage

in a ritual called Circling the Mountain. The film follows the last 5 days of Daiajari Tanno Kakudo, the monk to complete the grueling ritual of running a thousand marathons over the course of 7 years. This is the equivalent to a bit more than the circumference of the earth. He spends this time in solitude, aiming to live every day as if it were his last. He sprains muscles constantly, suffers from agonizing back pains, and has regular bouts of diarrhea. If he gives up along the way custom says he must commit suicide. If he succeeds he becomes a living buddha. Along the way he endures several nine-day fasts, with the intention of bringing the body as close as possible to death. The idea is to exhaust the mind, the body, everything, until nothing is left. This nothing may be filled again with the vast consciousness that lies below the surface of our lives. While the monk fasts he undergoes a metamorphosis of becoming almost-dead. As Tanno Kakudo emerges on the last day of the fast, assisted by two monks, I bury my face in my hands. The bones around his temples show, as it does with dying people. Here, the narrator explains, his sensory awareness comes crashing through, and he can hear the ash fall from an incense stick. I already know of the tricks death plays on perception. In a final conversation with a relative she conveyed how a grey hospice wall had turned into a vivid and saturated landscape of colors only visible to her, the dying. By the end of his run the monk knows every leaf, every bird song and seasonal change along their route around the mountain. During this ritual the body of the monk extends into the mountain. He seeks out all there is to know about the processes of being him. Through repetition he re-orders everything within himself: It is an exercise of experimenting with all possible combinations, of walking around a mountain, of grappling with the soft ever-shifting tension between body and surround.

↓ Exhaustion becomes potential for bliss. It is a play with plasticity – Where do I start and where does the mountain begin?

↓ In the spring the nausea has almost disappeared, and the mirror-shaped trace on the inside of my head only manifests at rare occasions. My brother tells me of the father of his friend, a man who seeks a similar kind of bliss through exhaustion as the marathon monks. He runs six-day races, also called ultra-

marathons. I feel a strong urge to witness this strive towards the bliss of exhaustion, and buy a ticket to the Balaton lake in Hungary where the next race will take place. I meet the man in the airport, and on the train down from Budapest he explains his anticipation. During his first race in Norway last summer he met what he calls Nirvana. He had not prepared for the race in Norway at all. He did not get enough sleep and food. He was sleeping on a cold floor at the communal showers, where an automatic light would go on and wake him up every time someone came in. And at a certain point, after having run for hours on end, he started hallucinating. At one point he thought the other contestants were crusaders that were chasing him. He perceived some kind of divine power, which spoke to him and said that it wanted him to win this race. This was the wildest and purest he had ever felt. Eventually he broke down. He didn't finish the race, but went to a hotel nearby and lay on the bed staring into the dark for days.

↓ The track that is used for the race is 1 km round and located on a shabby camping ground at the edge of the turquoise Balaton lake. The place is like an ant colony buzzing with organizers, runners and their helpers handing them drinks and fancy protein snacks that they stack inside little white huts along the track. I spend six days looking at the runners as they make their way round and round the track. Again I have to come to terms with the feeling of being an imposter. I try to focus on my own Daily Research. I notice their faces slide by, and the different gradations of exhaustion and agony in their eyes. I smile at them and give them encouraging cheers during the day. At night I hide behind the dark and watch voyeuristically.

↓ One man has so many blisters that he is moaning at every step he takes. He yells a great deal at his helper, a large unbelievably patient man, and his face is constantly wrenched into an agonized grimace. I wonder what on earth drives him forward in what must surely be an internalized purgatory. On the last day I give him two painkillers, and he seems truly grateful. He says I do not want to see his feet, as all his toenails have fallen off. I look at his cut-up running shoes and agree, repulsed by the thought of the nailless bloody toes below the socks.

Other runners look like they are basking in bliss. None of them stop (except one guy that dislocated his knee, who left the camp at three in the morning). They are mostly crooked, old and worn-out looking bodies, all slightly leaning to the left (the helper of the suffering man says that this is because of the exhaustive state they're in – the right brain half somehow shuts off and they are mostly guided by the left). The old are the ones that do best. One very tall lady with big legs, whom everybody calls Frau Doktor, sleeps one hour every night for the entire duration of the race. At any other time she just walks, with a satisfied look on her face. They all want to meet the wall, the mental battle of the voices telling them to stop running. The winner of the race has run 750 km at the end of the 6th day. Each of them stops at the large digital goal table, which keeps track of the distance achieved by each participant. Someone calls the goal table their altar, which seems ironically suitable, as runners drag themselves into its flickering blue light at 4 o'clock in the morning.

↓ I meet Doug, an American guy in his 70s. He casually walks the track with his friend Abichal and the two of them talk almost non-stop. Abichal is part of a religious movement that believe in ultra-marathons as a kind of spiritual awakening. Doug explains how he started his life as a runner in a very prestigious race in New York in the 70's. And that's what started the madness, he says in a rather self-deprecating voice. Since then he attended more ultra-marathons than he can count. There was a Hungarian runner he always used to run next to. Her name was Marina, and she had this shining bright light emanating from her. "Even when Marina wasn't running next to me, I could still feel her presence," he says.

↓ The racing became a bitter-sweet love affair. All the stuff he thought mattered didn't matter anymore. He became fixated on the runner's high, like an addiction. He says he's given everything up for the sport. "Throughout my life I have been inspired by Hemingway. You can say that I have followed him, looked to him for guidance. I recognize his struggles, even though my medium is running and not writing. Hemingway felt sorry for his wife. Often he had barely enough food for her, and sometimes he went without food so that he could feed

her. But Hemingway had his writing, and his literary life and community, something his wife could not be part of. And I often felt the same way, that my wife would never be able to understand the drive of running.”

↓ The next day I meet him at the broken-down camper-vans at the other end of the track. We talk about architecture. Doug is an architecture freak, and he has gone around the world to visit historic homes of architects. I ask him if he knows Arakawa & Gins, which he doesn't. I tell him that they were building architecture to defy death. They wanted architecture to continuously challenge the body, to invite its inhabitants to never stop exploring the relationship between body and the environment. “Running is a bit like this,” Doug says. “Every time you run the track it's different. You will become intimately acquainted with every little inch of that one kilometer. Did you notice the laughing toads at the corner there? They come out around 9pm. And the fluffy pollen trees at the counting post start shedding their offspring at sunset.... You notice how the rhythms of your body blend in with the subtle rhythms of the environment. You might say it's an exercise of accepting the changes that are taking place within you.”

Doug grabs an ice cream and gets up to go back on the track. I want him to stay and tell me more about this drive to run, as if it is some kind of life secret veiled as obsession.

↓ It is said that the 18th century French aristocrat and father of modern chemistry, Antoine Lavoisier, would dream up the chemical constellations that he would go try out in his laboratory when he woke. Daily Research is the task of going slow enough to feel the rumblings of the system, and perhaps even the chaotic forces of the pre-rumblings. It also goes under another, more passionate, name: Obsession. *DR* is no straightforward task. It requires focused commitment, of listening and jotting down the minute graduations of change on whatever surface is at hand. Of feeling the temperature of this surface with your elbow *and* your lips. Were Lavoisier's dreams guiding his explorations, like a dowsing stick leading to water? As if some exterior force hinted him at the right chemical

constellation? Or were they tangible manifestations of some subconscious sense at the cusp of knowing?

↓ I sleep in my little orange tent, behind the dusty shelves. My tools for measurement and recording lie scattered around the site. I dream that I am buying a house from a man and a woman. They are architects but have taken on the role of real estate agents (Gins and Arakawa 2002: 23). The house is nothing more than a pile of strangely shaped surfaces held together with a transparent rubbery material. It covers a vast area. The Ubiquity House they call it, and the lady, Madeline, offers me to enter the house. "In order to enter you have to pick up the slippery fabric of the house and insert yourself into it," she says. I am skeptical, but let's be honest, I was skeptical of the core sample warehouse at first, and look at the interdependence with which I am now taking refuge in all its archival thoroughness.

The house changes shape and volume as I move my body around. We work together to shape the house as we go. Even our breath affects the architecture as it contracts and expands like an organism around us. *"Having once begun to architect their surroundings, human beings never stop. A person turns a desert or a forest into an architectural surround by how she moves through it. Advancing and cutting paths, fending for herself and defending herself, she uses her limbs to erect enclosures or break them,"* says Madeline Gins (Gins and Arakawa 2002: 44).

The house is not a final shape, but morphs and changes as it is used. It is constructed to exist in the tense of "what if," the couple tell me. It is meant to challenge and destabilize the body. It is placing the body in a state of disequilibrium, as it keeps re-harmonizing itself in relation with the surroundings. It is meant to *train* the body against the continuous degradation of human tissue. "We want the world to question everything they are accustomed to—even death," says the man, whose name is Arakawa. We need to change the way our bodies interact with the world. If we continue this course, in the name of progress and development, we are wiping out the natural world, and the possibility for most human beings to live meaningful, harmonious lives." "We

have effectively killed off forests, the coral reefs, more species than we even know of, indigenous cultures and the diversity of their languages,” says Madeline. Daily research needs to keep in focus a new way of creating an environment that will force us to notice our ways of interacting with the world, and teach us to create new, less harmful ones. Our architecture disrupts bodily experience, and thereby makes it possible to see things afresh.

The couple asks me to be more of a human-snail than a human when living in this house. They ask me to do *human-snail DR*. I think of the small mollusks that wash up on the shore close to my house. Rather than a smooth hard surface some of the snail houses resemble a sponge or a cauliflower, due to rising acidification of the ocean. Snails have successfully obtained the unimaginable quest of flesh merging into shelter, as they erase the boundaries between themselves and the environment. I feel a chill down my spine realizing that the unavoidable being-with the environment is the snail’s bad luck.

“The house is a tool—a procedural tool. It is a means for examining the sensorium. With this tool you may explore ways of reconfiguring the synaptic connections formed in the brain from a lifetime of living in static architecture. Never be so damn sure of yourself.” I hear Madeline’s voice echo. As I continue to adapt with and through this environment I too start to change. The dream spans over millennia. I become more aware of the changes and shifts in the perceptual posture of my body, as I am reborn into new generations, and eventually I start to notice with precision how it interacts with the surroundings. While constantly having to hold and mould the house is exhausting at times I notice my body becoming accustomed to perceiving even the subtlest of changes. We move with the weather.

When I wake up I realize my tent has collapsed on top of me, and my arms are stretched stiff into the waxed canvas folds.

↓ “The void is created by consuming reserves of past time in order to run the monstrous body of the present.” The keeper emerges from his office. He now

looks more like a ghost, wearing an oversized dark coat and a felt hat. He points to a large poster, showing the layered strata of the Groningen Gas Field and the empty holes that illustrate the gas reservoirs. "Energy is never only extracted from the ground. It is also extracted from our bodies. It manifests through sensory exhaustion from bodies having to continually adapt to volatile and rapid changes within the environment. The void is created in humans because they have not evolved to perceive these rhythms of past times that pass through ours. The void can only be filled through a realization of this relationship: The tapping of the earth's energy, and the mutual exhaustion of our bodies are connected, even if the exhaustion shows itself through other aspects of our lives." With the purposeful, slow movements of a soothsayer he hovers his hands across a pair of fine-grained cores of gravel. "We have consumed so much past time, fossilized into reserves of oil, gas and coal buried deep in the ground, that it is now impossible to feel grounded in the present. We have entered into an addiction with past time preserved as fossils, and that is clouding our connection with the future." [2]

↓ I am drawing a large map along the storage shelves in a remote walkway in the core sample storage warehouse. It is stratified as layers of encounters over the last year and a half of research: the detailed descriptions of the different intensities of man-made earthquakes felt in the bodies of the people in Slochteren. They are perceiving the rhythms of different temporalities and indexing them as gradations of experience. They are living at the forefront of a future of changes to come. They are unconsciously training their bodies to attune to change. And I draw the voluntary exhaustion of the monks and the ultra-runners and their altered sensory perceptions. They are challenging the desert landscape within themselves by examining every grain of their being, through excruciating and repetitive actions. They are training the plasticity of their bodies and of their minds. Arakawa & Gins wanted to create architecture that would reverse the destiny of a person. Defying death is disjointing a linear perception of time. They want to infuse the experience of living with new forms of energy and new forms of being together. To uncover a virtual energy that continuously expands as the body realizes what it can do.

“How do human-snails overcome the limits of our temporal frameworks?” I ask myself out loud. “That is now for you to find out,” the keeper says in a creaky voice hovering somewhere in the dark behind a large storage unit....

Notes

[1] The keeper of the core samples at times lends the voice of the French philosopher Henri Bergson, more specifically his last work *The Two Sources of Morality and Religion*. His lendings are not necessarily verbatim. The present remarks also draw on Suzanne Guerlac’s piece “Bergson, the Void, and the Politics of Life.” See pages 40-60.

[2] See Suzanne Guerlac’s piece “Bergson, the Void, and the Politics of Life,” pages 40-60.

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