INTRODUCTION: HOW IT ALL BEGAN

There was something about the truth, about the nature of reality that I needed to understand and that's how it began. There was an urgency about this and that's how it began. I needed to immerse myself in creative material processes in order to comprehend, and that's how it began: the quest to understand how one is affected or not. What reality consists of. Where and how everything physical connects or separates.

Preceding this, I had spent years as an artist creating drawings of organic materials, studying the matter in minute detail, perusing surfaces trying to find the something I was searching for. I would stay in my room by the easel for prolonged periods of time, living the solitary and disciplined existence of someone who needs to figure it out. And when what happened, came to pass, I found the drawings could not explain it to me.

Because there was horror, and that's how it really began.

Throughout this journey, I have found I am still lacking in my ability to explain or express it. How horrific it was, the change, even as my face became hers in processes both abrupt and slow. What happened continues to exist as the trauma of a downwards journey, the surprise transformation of cells, and a continued, crackling dryness that in the end was an actual fire.

Overall, there was a sense of colour, tactility, and scent. I register colour very well, and so, I did. But where to go from there, with all those colours.

And so, we have our beginning, the commencement of this tale. It began as beginnings are perceived to do and stuttered and recurred and was there really an actual timeline or just a threaded through tangled up time and it always seemed muddled, everything, but perhaps that was just perception and a subjective one at that. And then there were our affected and muddled faces in the mirror, all new each time although all new didn't and doesn't exist as it can't because time seems to be recurring with spatial qualities and wounds are temporal in their continuous cutting through of lifeforms both organic and inorganic, and it continues to be, and is currently, a lot.

And at some point throughout the beginning an eyelid started hanging, the hearing decreased, and there was something faulty in the cardiovascular system. And the clarity of mind suffered. Of course. Such things happen in a fire. And in the midst of it all, she fell and broke her arm. She fell in the forest during winter, a long log herself. It was the forest and winter, all fresh and clear. There was the crispness of a broken bone, a clear sky.

This wasn't my first encounter with illness. Or perhaps encounter isn't the appropriate term, it felt more like a slow waltz that sometimes was a steady thing, and at other times it let go. Or I let go. What is called 'state of health' seemed always present and always missing, it existed (or its lack of) as a million versions of itself, a million continued maybe's all with different faces/phases/stages.

And I knew there was something about the truth, about the nature of reality that I needed to understand and that's how it began. There was something about the processes of touch within matter that was of the highest urgency to comprehend and that's how it began. There was the fact that touch ran so deep, in me, but also in her, and how throughout this process all matter suddenly seemed soft and spongy, and that's how it began. Mine was a deep need to

understand how bodies are materialised through others and that's how it began. I had a built-up desperation to understand what I saw as matter's cruelty and that's how it all began. I needed to be in the know and that's how it began: the quest to understand how one is affected or not. What reality consists of. Where and how everything physical connects or separates. And that's how it—in actuality—began.

GHOSTS



The picture we see is of two black holes merging, integrating, bending spacetime as their inner gravitation—and what I call their material desire—brings them closer and closer until the merge is complete. Through this action the curves of the universe are warped in ways that send ripples and waves throughout. A touch between two entities such as these touches all others through a wave that reverberates through space, travelling with the speed of light through spacetime. It's ringing travels and spreads out, onwards, onwards, for more than a billion years until it reaches us as an echo, or rather, a ghost of a touch so deep it became a merge.

When I say it reaches us, the part of the received touch I refer to, is the ghostly spread out touches of the original wave reaching the machinery of one of our time's own ghost catchers (as physics have always been spooked, haunted and threaded through with other times, spaces and beings, and all interactions live in us as shadows that have nothing to do with the absence of light, but everything to do with the presence of the intermingled interactions of past, present and future existence: the traces of affections, bodies, voices and touches, I use the terminology of ghosts).

The gravitational waves ripple through space as wavelets in a vast dark ocean drizzled with photons of light from a multitude of speckled stars, until the waves reach us and our earthly existence: here, the waves are picked up by a machine with such fine-tuned instruments that it isolates and blocks out all other wavelengths, and through its multi-layered translation from gravitation to sound let us hear the faint musical chirp of something that happened in a time so far away we can hardly fathom it. The ghosts of past embraces, such as this one, are currently present and if we try, every now and then we can play its music, as the chirps of "our" merge rise from the low end of the piano to the note of middle C before abruptly going silent.²

¹ In physics, spacetime is a mathematical model that combines the three dimensions of space and one dimension of time into a single four-dimensional manifold. Einstein identified the property of spacetime, which is responsible for gravity as its curvature. Space and time in Einstein's universe are no longer flat (as implicitly assumed by Newton) but can be pushed and pulled, stretched and warped by matter.

² LIGO, The Laser Interferometer Gravitational-Wave Observatory in Washington, made the first-ever detection of gravitational waves in September 2015, created by two merging black holes.

Keeping our ears and minds open to the most minuscule of sounds and its embracing gestures, we continue onwards, onwards into the deep entangled web of our existence's 'touched' materialisation: contemplating sound as touch, cymatics is the discipline that makes visible the effect of sound on matter, such as sand or water, through the vibration of sound. Thus, sound causes form within matter and has been shown to create and re-create what humankind perceive as the archetypes of forms in nature. And even as the sound frequencies increase, so does the complexity of the patterns. Then let us take a leap to the universe forming and let us imagine the immense and complex timbre and textures of the sounds of its creation, of what we call the big bang. And then picture material forming through a multitude of tones differing in pitch, duration, and vibrational intensity, from the soft tanginess of its bass notes to the imagined metallic sharpness of the shrills of its upper register, its harmonies and rhythmic inflictions jointly weaving the intertwined layers of its sound waves and weaves. Matter was touched and affected by what was not discernible by any human eye, but evermore continuously present through a complex multitude of sound journeying through this new web or weave of space-time-matter, its ghostly quality now intra-actively³ embedded in the very core of its material existence.

I would like you to bring these images of what touch is and can be (in its entangled specificities) with you as we descend deeper into the very components of the fabric of space, as far as we can journey into its immense and dark weave. Let us first again imagine the texture of the universe, with its splashes of galaxies, being moved by waves with crests and troughs similar to those of the sea, the waves sometimes so agitated as to create the gaps that become black holes, at other times and places barely oscillating as in the seemingly still surface of a lake: let us imagine that this still-and-turmoil is an altogether entangled singular mass of a multitudinous proportion, a gel like liquid wiggling and rippling throughout its own very being, a vast body constructed by the grip of every conceivable entity holding another, and yet another, in the grasp of a fluctuating intra-related relationship. Every subatomic particle finds itself holding on, grasping another in an (electromagnetic) grip of varying strength and polar force, and through these mutual embraces, these touch points of exchanges with another and through the one yet another, brings into flesh the concept of we. Not I, but we: in the deep and entangled vastness of the universe the subatomic particle of the electron (Karen Barad and Niels Bohr's electron) is at once a particle/wave so tiny that it is without spatial dimension, and it is as big as the universe in its entangled specificities. It is part of the weave, and it is the weave itself: threaded through the tapestry of space-time-matter in the very act of being.

As to the question of material agency, as to the wants and wishes of matter, this is what I perceive that matter desires: the mutual grip of an all-encompassing touch; the act of touching itself through all others; of becoming with and through; of existence as the active materialisation of relationships; of never contemplating solitude (solitude as an unfathomable size, not a concept to think other concepts through—resulting in a division of matter, times and spaces—but existence as an integrated weave of material relationships engaged in re-thinking and re-assessing how we all got here; to this point; where the concepts of solitude, separation, binaries, singular identity, linear causality and hierarchy define our physical reality (or perhaps now I am expressing my own desires).

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³ Intra-action is a Baradian term (coined by Karen Barad and a key concept of her agential realism as developed in *Meeting the Universe Halfway* from 2007) used to replace 'interaction,' which necessitates pre-established bodies that then participate in action with each other.

As the electrons of the synapses of our brains operate through the signals, they pass in the literalisation of the materiality of imagining, I want us to continue to think with and through. The laws of quantum physics state that everything that exists is unstable (these laws not exempted) and are jumps, ripples or touches from one interaction to another. At this minute scale of the grains of space the dance of nature does not take place to the rhythm of the baton of a single orchestral conductor, at a single tempo: there is no mechanical clockwork, direct causality, or Newtonian determinism: each process dances to its own rhythm whilst keeping in touch with all others in an integrated coexistence of attentive listening. In the midst of this material dance everything pulsates and fluctuates and touches: all things and beings are continually interacting, and in doing so each bears the traces of that which it has interacted, and in this sense all things continuously exchange information about themselves and each other. A material being is thus always the ghost of itself and all others: its past, present, and future embraces intertwine in what presents itself to the human mind as an integrated whole, an opaque and static form of being. Immersed in this dance we are each other's ghostly presence, pulsating and fluctuating, our beings descended in waves of touches, rhythms, waves and weaves, our bodies soaking in the presence of others. Our cells and molecules are currently manifesting the threading through of narratives that brought it here, to this place, to our meeting, where we are contemplating our ghostliness and therefore our response(ability), imagining the possibility of our touch touching all others.

AS I AM STILL MYSELF (OF DARKNESS AND SOLIDITY)

As I am still myself, I gaze out at you through eyes that are filled to the brim with me and all of mine, I feel myself jam-pack my body with my own being, my body parts are so full there is no entry to be found for you, no trespassing to be had, I am myself, still, through the fringes of my being, to the furthest of my reach. To the outermost particle of me I bring myself, my own being, and as I occupy the space of me, you cannot enter.

I was not always present in myself like this, not to this degree, and the cells of my body continuously manifest those past experiences of transgression, but for now, for now, I come through clear and sharp: with the sound of a bee, the smell of star anise, and an additional side dish of something musky and prickly, crushed nutmeg or pepper corn. I open my mouth and words start to take shape, they are the new, but they are not for you, they are mine, not yours. They bear the rumblings of my body and mind and as such, they carry a vulnerable truth, one revealing of personal matters such as the effect of present hormones on signalling pathways and the regulation of nervous tissue. It is a voice easily lost in other voices, so not for you, at no time for you. The knowledge of my body is a multitudinous one, yet so easily trespassed.

Being breached occurs through different approaches, and whereas all haunt, some come with a more palpable violence. As such, my body and mind experience time coexisting in matter through touch on the regular, as what haunts me recurs, and what more, it seems the narratives unfolding are largely the same, it is my belief that they will play out as a merry-goround of all time. The power games and the hierarchies, the trespassing and violence in an indefinite continuation creating new marks and bodies, and all that those breed and foster.

I find myself in a time of supposedly new ideas, times carrying the loss of faith and the progress of reason, even though I can't see much of it, reason. The prevailing antimaterialist agenda is one of little consequence to me, as my body expresses other's touch on the daily, and has not missed one day, not one. Others float within the watery essence of me, even though tremendous force is used to keep them out. I cannot help being part of a fabric that carries other's stories into my own, not to be separated, although in this moment the force or violence of it all seems less, and I am able to come through loud and clear, at least to myself, with myself, so in this moment I ring like a bell, and I am the bell all whilst carrying the highest of hopes for the sound's continued reach.

And in this instant of a different brew, I fill myself up like a cup, up-up, and fully saturated and to the brim I have hopes of there being more to this existence (of mine), namely something beautiful and unexpected, a calm and protected realm perhaps, something like a deep within the deep, and furthermore, that the insides of everything present there mirrors and continues indefinitely both within and throughout. And that, in this housed deep, that the softest and most diminutive of say-sos would not wane, or turn estranged, but keep. Subsequently, it so follows that the Earth, at its core, has oceans beneath its oceans, some so large as to contain all, and solid iron inside the floating ones, that solids and liquids fluctuate, and who can say what more (of mysteries and galore). And as I concede, both to myself and to my surroundings in their inexplicable connectedness, I find that through my extended being, I could be it, the Earth and its sea after sea, iron after iron, and whatever it is that lingers there (of darkness and solidity).

(NO REST FOR THE WICKED)

My cochineal cloak takes its colour from the powdered pigment of scale insect bodies, it borrows their splendour, even in death. I drape it over my body, over this piece of land with its dry grass and small brown tusks. The insect dye flames with alarm, an alarm that went off too late, we will die, as they did, too late now, and this alarm of losing existence, of losing grip, rings and rumbles throughout. Akin to a lobster twisting in a boiling kettle, its exoskeleton blushing from agony and nothingness, the cruelty of material life stares us in the face as red boiled splendour. The beauty of the sin, of a murder-to-be, or to-be-had. We cloak ourselves in it, as banners of our time, our attire acknowledges our violence and defeat as the (dye)stuff of small beady creatures sends its last alarm: it is too late, our fate, it is too late.

As fellow beings of this earth, we know it's too late, we took everything and baked it into a delicious syrupy cake and ate it and licked our plates and let out sighs of delight and it's gone now, all that was beloved and treasured, and with continuous climate change comes the scorching heat of defeat, as well as the frenzied brains and neural systems of bodies gone haywire and thus, no rest for the wicked.

Exceptions are to be made, we love exceptions and have perhaps built our lives on them, wanting to be exempt, and this actual exception seems to be for you, the you existing in relation to the I of this motive. Your appearance is surprisingly correspondingly hued, but yours seems the red of a descending sun, the warmth and comfort of a fireplace with fading embers, and the soft glow of rest and nightfall and what could happen after (this wild ride), at least for you.

Leaning towards me, your heart beats with an even rhythm, no vagus nerve-mediated paroxysmal atrial fibrillation there, no signs of an enhanced vagal activity or periodic episodes of A-fib after meals or while resting, even your curls are the picture of health and surplus vitamin B—all immaculate ringlets bouncing in the air—no need or use for the methyl version of folic acid here, you must not carry any genetic mutations such as the MTHFR, like at least 40 % of us do, the M*TH*RF*R abbreviation spelling out the frustration of our like, as it seems the switches of our DNA turns on and off on their own behest, the epigenetic comings and goings of forefathers and -mothers spelled out for all to see in the inner workings of our bodies, their mouths still greedily grasping for cigarettes and increasingly glutenous loafs of white bread, their lives quietly expressing in our skeletal system where calcium doesn't collaborate with vitamin D, because the levels are off and something else, sodium. I have to think about these things and whales' stomachs are being filled with plastic, they have this tendency to scream as they rush towards their death, and although it is a nuisance, we understand, on account of their stomachs being so hungry and yet so full. Nutrition is not what it used to be, for any of us. If only whales could press pause a hundred years, and come back victorious, prime examples of an evolutionary symbiosis with the Ideonella sakaiensis bacterium to digest the plastic remains of our time, and then return with wry, overbearing smiles upon these empty efforts of human interspecies destruction.

So, it seems grocery shopping bags are now the new stomach linings. I brought one home yesterday and took it out again to deliver something somewhere. A thing somewhere and a murder maybe, two birds with one stone, or mammals, could be. And my head carries it all whilst living it, no explanation warranted for its facial skin creasing and wrinkling at the edges, but all around, too, despite using Rejuvenating Day Cream with hydrolysed Roe from an esteemed brand, no supposed toxic ingredients except some, but my face and body are

probably afflicted with the toasted yellow of lead white or some supposed low-level dietary mercury or pharmaceutical paraformaldehyde or just the normal random phthalates or polychlorinated biphenyls or polyfluoroalkyl substances or something similar I touched or consumed or spilled anyway and it is a fastidious journey for those of us not being exempt. (And there it is, or could be, nature turning against, sending it back smack in the face).

And even if something miraculous would approach in the distance, like a flashing blue light on the horizon, a promised yet still mysterious ship to the rescue, the multigenerational trauma turned individual brain biochemistry (mine) would certainly choose another, the path of a quickly ascending mountain (to-be), no exceptions made and surely no rest for the wicked, just upwards and onwards into the stony terrain with its foreboding of desert winds, and lungs so filled with dust they rust and oxidize and the alveoli will turn the chalky colours of fall. All peels, slowly but surely, all surfaces come off. The ochre with its iron oxides, its surface crackling and flaking, eventually exhausting all restorative efforts as I conceivably will too.

And the you that is a you in relation to the I of this motive gets to leave, the light always upon your being and the exquisiteness of your appearance radiating the innocence of (sound) health. You are exempt so you get to go. I get the resident desert winds and stones blushing hard from heat, my body flushed from barn burner temperatures if not an early menopause and/or the polar ice melting on at least one pole (it is confusing), and I lay my head down to rest on the ground on this little brown turf, as it is so heavy. So heavy with the absence of a you, with the dried up remnants of what was an actual previous life and negative mental chatter brought about by somewhat but also not necessarily shameful actions and an immense number of glutenous cakes devoured and hiding and inconsistent interpersonal relations, especially within family and thoughts being mountainous stones on a roll rolling and also the whole landscape being heated in heat and not forgetting the forget-me-nots, also known as (aka) the missing ozone layer and the fast approaching ghosts of species gone extinct and the fate of humanity fast approaching.

THE BODILY LIFE

The bodily life is a war; is at war; it is an enemy that fires shots in the dark; a sniper in the grass on a perpetual hunt. The cold, silky grass on the ground tickles its face, tickles its fingers, which shake. What is at stake: both hunted and hunter, whose hands, interlaced, quiver with anticipation and fear. Whose voices are simultaneous and at the ready.

Ready. And the dark is new, it is, it is the forged material black of carbon nanotubes, its densely packed laboratorial growths swallowing photons, letting them sink in good. It is also the old black of charcoal as it bursts into glowing, the moment of strike, of heat and fever and time. The (non-)colour of the universe with its blackened spaceships: black as in waiting, as in compressing, as in supergravity and black holes and being held so tight it most assuredly must hurt.

This grip. What can it be, such a tight grip? It is the body's contradictory pull of coming and going, charging and -not, simultaneously at the ready and at the defense: an all-around dance of confusion and ridiculousness. This dance. This coupled rumble is an altogether state of high bodily alert, of muscles tensing, and ears so urgently awaiting information they start syncing, slowing down, slow. Their introspection is minded for the creaking of drums, the rap of bone and miniscule cellular adjustments. Hands covering ears create sounds like the rustling of silk intensifying (still this dance), and then the deeper, throatier sounds appear.

Hedging its bet, or just coughing up something, the surrounding terrain offers up a grotto-seemingly slow to manifest, but not a mirage. The rotunda gets ready for its close up, gets ready to bare, a numbered round. Throughout its centre and what we presume are walls, stones open their cores, they creak and split, their movements as discernible as small animals', their material processes out loud.

So loud, the cacophony of others. Material entities caught in the act of touching, integrating, and spilling, slipping. Selves leaking into, onto others: the sheer mess of it. Matter is perspiring, oozing, even dripping, from processes of expansion and fusion: again, the mess of it. Gushing on the floor, no shame: the mess of it. And the mess of it lives, breathes, pours into the ground, into the air: where bacteria attract all things moist to form one cloud after the other of softly shaped material gushings. It is all around, in surround sound: the mess of it.

Deep in this entangled matter-mess, again: the hunted body. Who knew. The body stops at the gas station, picks up a plastic wrapped donut, unwraps it under the flickering ceiling lights, lets its teeth sink in to what feels moist and soft. Its tissue slowly integrating the other, the body leans towards the wall, feels the rough stumble of stone against its back, and with it, the comforting thought of contour.

A feeling of safety pending on the impossibility of penetration. A feeling of safety pending on being impenetrable.

But the mouth was just caught red handed. Its saliva red handed, and full of traces. Without the illusion/delusion of clean hands, just the body's hands, there's this: there are the tactile sensations of touch, and then there's more. As in overgrown, monstrous tales of more. Touching material bodies, again and again, they enter the body's surface layer, its skin, its blood vessels, churns around and around in a merry-go-round of systemic processes that constitute (the self) as more, so much more.

And the hope of being separate, of being solid and impenetrable, faints and flickers, and it's on.

---Hush! Ears to the ground reveal the hunter, in a fumbled trot. And the fear and loathing ricochets throughout the rotunda, the grass is slippery, the landscape a system so overwrought it flips out and turns into something slimy.

And the consequence in the moment the bullet ascends, the slowly fading rings of a stone thrown into water, of narratives growing, floating on the liquid surface, intersecting and mingling, multiplying, stretching out into new growths and new patterns: the result of it we cannot foresee.

And the breached body pumps gas at the gas station: the shiny sludge blackness of compressed water plants, of hovering beetles with veined wings, of crisscrossing branches perched in mid-air, of shifting periods defined by sudden dampness or cold, of synergies of soil and rocks and languid movements. It pools on the floor in shiny, sticky rainbow ringlets of light: the light of circular, compressed time and interlaced narratives. It smells: the pungent, metallic smell of petroleum and others.

And the ear drums ringing ringing like tower church bells. What is it all for? The forces fighting each other oscillate within and through each other, they resonate deeper and darker than sound, sticking to each other as if in a weave of no-choice, of never having chosen for themselves, or actually exactly the opposite: having chosen and the choice weaving a tapestry of consequence and alienation. Choosing every day and ending up with the same tapestry of consequence and alienation.

It is Echo, it is Narcissus, it is Janus, all of them, so many more. A mashup of voices, high and low. It is all of the body's faces in the mirror, in the photos, multiplying, everywhere, identity hobbling along. It is arms and legs folded into a hobble: hobbling along. It is the body as determinism, as other, as interlaced protein powder and vitamin K into a healthy meal. The body as an earth machine running on this.

It is walking around like a war, as a mass of war, as acute action and reaction, as warped causality, as a living, breathing slow rejection process of oneself. As if there were hatred already from the start, as if the division of mind and body, nature and culture, material and immaterial, existed always, as if Descartes suffered such a body, this leaky materiality, as if Newton knew. The deep wish to leave it behind, to put it in a plastic bag and drop it behind the gas station. Walk away.

THE FALL

There are others here with me: pale bodies in yellow or bluish hues —all elongated, outstretched limbs angled perpendicularly towards each other. The lot of us move in a symphony of coordinated movements, slowly turning towards the left, then the right, as with the hands of a clock or the circulating water of a lake. Our vertical trajectory is either to or from the earth; it is not yet discernible—neither to participants nor outside observers—but still to be determined, as so many things in existence are.

It is quite slow and wondrous and carefully choreographed, this move, or shift—yet again, still to be determined. Our bodies hover along the surface of the terracotta ground in what appears to be an ambivalence of altitude: at times those farthest down in our formation graze the surface, naked feet slipping into the clay —at other times they are lifted just above the ground, and then again higher.

From an outside perspective, ours is a turning together of bodies that haven't seen the sun for a while, the pale bodies of rainy days and an existence clearly led in the north; bodies whose existence give away solar motion patterns, and light phases, and the underlying existence of a system of stars of varying flame and force, and such external workings. Observing us closely, the veins under our skin chronicle the stories of our bodies, mapping their processes and perpetual circulatory states, the transport of oxygen and iron and all else, how it all functions and fills up and releases. These patterns describe us, in our naked state, as a naked narrative of blushing hues. What can be read is here to read. All outside observers need to do, is raise their gaze towards the neck, the feet, the sockets of the eye, take it all in. No secrets anywhere for a skilled eye, one that can bear the nakedness of others.

On the inside of our formation these realisations animate a range of emotions in our now wide-eyed faces. Peering out at our immediate surroundings of bodies and air, our whiteness does seem to be lighted from afar. And perhaps we even sense the emitting of photons from our bodies, because our eyes tingle as we lean into the present glow's rhythmic pattern as it rises and falls over the course of a day, linked to body clocks and metabolic rhythms as it appears to be. And through the glow pattern's continuation, it seems we are still on the receiving end, as the airborne molecules of the clay and sand beneath ensheath us. The ground is absorbed by what appears to be its very own ambivalence of position and altitude, and perhaps even of build; miniscule pieces of organic matter, minerals, metal oxides, gases, drops of fluid and dust separate and take an airborne tumble.

In the midst of the rough-and-tumble, we inhale and an interference occurs: a minuscule piece is drawn in with the air, the molecule starts its passage within the body's cavities and there seems to be no option here for refusal or rebuke, just the bluntness of an unsolicited meeting. The molecule vibrates in its given receptor and starts a downpour of bodily processes, none of which we consciously control. Having bits and pieces added might be part of the bargain, as we are aware other parts trickle down as best they can. Not only from our surrounding clay-scape with its subtle release of mineral odours (the horse-radish smell of Selenium and the chalky Kaolinite), but from us, our edges continuously pushed and consumed. The strangeness of this fact never escapes us, how piece-by-piece is being released from our contour and perched into what we perceive as an outside—as opposed to an inside—and disappears out of our reach, as if some of our particles never wanted part, but carried an itch for different times and constellations of matter throughout.

Throwing an arm out towards the debris in the hopes of meeting an edge or contour, we seem to sense none except the something that keeps things together, an in-betweenness currently unknown. So questions of what this is, or what we are, or appear to be—within categories of air or ground—are continuously muddled. Is ours an upwards or downwards trajectory, are we in a state of beginnings or endings: status clearly unclear. And when computations and calculations are carried out, the results are questions rejected, dissolving into quantum infinities. The we who formulate the questions do not even know the matter parts implied, the unknowns of matter theory are presumably slow and interact only with gravity in ways noticeable.

As follows, our minds start to blaze, multiple neurons light up simultaneously, the whitish fiery glow of a neuron pathway overload brought on by realisations of things small and large and where they sit in the world, as well as some kind of foresight into what this moment might hold. So we turn. We turn yet again and this time our eyes fall open towards each other like pale unfolding night-time flowers, slightly frumpled from time passed. Sore and sandy eyes aim to capture the moment and to observe it well. But squinting, we lose each other's bodily outlines and a microbial shimmer appears, a veil outlining a now-vanished human core. It gleams throughout our surface, inside our bodies, within our cells, opening up all kinds of shaky inquisitions. Are there others present, how come and why. Where are our borders, and also, permeability, and if so, and then what.

With a jolt, we realise we can feel these others in our arteries, they must travel our veins, no surprise they were suddenly visible in the eye tissues with the sclera's open faced vascular patterns. We can feel them riding the streams or currents of our circulatory system, their compulsive behaviours following or disrupting biological rhythms, no kidding, intermittently taunting the liver and stuffing the endocrine receptors, continuously carrying out orders of search and destroy. With this commotion comes the sense of blending and levelling and an image of bodies and the ground mashing together, all wonkily askew, although we can't tell why such a thing would occur. We know that losing oneself in another gives the miry, muddy face of being born anew, but what happens when the others are already there.

And for a second there we start to feel overwhelmed-attacked-as if being devoured instead of devouring never really presented itself to us as a could-be reality. We are unused-to a piling together-to staying smack down in the middle of the complex processes that make and bake (and shake), here made visible. And even the flimsiest of ideas of what this moment could unfold or where this trajectory might end, cracks our mouths open in the way too heavy sorrow or joy does, opens them abruptly while withholding sound. It is entirely too large, this sound, whoppingly so: the mouth quips open, keeps ajar, closes, cannot.

And with our voices bouldering inside our bodies' cavities there is an understanding that this is the actual song of the hour, the rumblings of inside bodies, echoing bone densities and internal clattering teeth. And the music playing is no more ours any more than this taunting and haunting is, so let's enjoy its rhythm.

THE GOBLETS (MYALGIC ENCEPHALOMYELITIS/CHRONIC FATIGUE SYNDROME)

Bones and muscles appear to burn with a dry fervent heat, bones and muscles, they seem to burn with an inner fire in a slow but progressive process, bringing slowness in focusing on objects, especially those close up and kept close for a reason, the eyes, to elaborate it is chronic inflammation and cognitive difficulties including memory processing, involving the brain, there are several biomarkers of inflammation and sustained immune responses in the blood, the blood and the immune system, how about the microbial signatures of dysbiosis in the intestinal microbiome, the intestines, and even asleep, the stress-responsive neural systems are on high alert, the nervous system, not allowing restorative sleep, signalling that it is not safe to relax, which it cannot be, because something is burning, or rather, it is all burning, so we step back, and there's the epigenetic changes of the forefathers/mothers, changes in miRNA expression, covalent histone modifications, and methylation of DNA, and then we are one step closer, perhaps, how about organochlorine pesticides, their exposure typically through inhalation or ingestion, the mouth, the lungs, the stomach, but also through water, foodstuffs, air, dermal exposure, and/or vertical transmission from mothers to offspring during pregnancy and lactation, and it is enough to bring it on, the bleak pink of fatigue, and so many pesticide company controversies wiped from google search, yet some studies still linger on PubMed, but who knows with this burnt brain, how it all went down, but then again, how about chlorinated hydrocarbons used extensively from the 1940s and throughout the 1960s in agriculture and mosquito control, and they were alive then, one's relatives, even parents, and they had bare hands/lungs/open mouths.

We count to 1. And then we count some more.

THE GOBLETS (DEMENTIA)

The us that is we appear to burn with a dry heat, in a slow but steady erasure of who and what we are and were, past tense now coming in as our minds become progressively inflamed, and we were something important to ourselves, our memories and impressions mattered, to elaborate it is chronic inflammation and advancing cognitive difficulties including remembering or recall, all when it is of the uttermost importance to understand when we started losing and why, the occipital lobe, right angular gyrus, parahippocampal gyrus and lateral prefrontal cortex, to continue there are abnormalities in the brain's cholinergic, noradrenergic, serotonergic, and dopaminergic neurotransmitters, the cortical and neuronal systems, the cells of these systems filling up with neurofibrillary tangles, and it is all tangled, the us that is gradually made into something else: cut and paste, rearrange, and it actually is that brutal, and altered gut microbes are suggested as possible contributors to amyloid plaques, as proteins produced by intestinal bacteria modify the interaction between the immune and nervous system, and we are already losing our language skills in the brain's left hemisphere, so why not here too, in our literal centre, losing our ability to interact, long gone, vascular dysfunctions cause altered brain blood flow and pressure, and that can't be good either, pressure, and how about disturbed circadian rhythms creating sleep disturbances and sleeplessness, although who can sleep in the midst of a fire anyway, because something is burning, or rather, it is *all* burning, both inside and outside the body (if we are still discerning difference this way), and it is a cliche to say but still true though, so we go back, this time to the altered and dysregulated gut microbiome, there's even an altered oral flora and the bloodstream is a pathway, up to no good, and early childhood exposure to broad scale antibiotics is corelated with several gastrointestinal, immunologic, and neurocognitive conditions, and antibiotics as disruptors of gut microbiota can promote the hallmarks of dementia, and there we are gut dysbiosis with a larger population of enterotype III bacteria, and although causality is a slippery slope, it seems our use of broad scale antibiotics is slithery too, the actual drawbacks to their use ranging from the selection for and spread of resistance across multiple bacterial species, to the aforementioned detrimental effect on the host microbiome, the host, i.e. us.

We count to 2. Then we count some more.

THE GOBLETS (MAJOR DEPRESSIVE DISORDER)

Our thoughts appear to burn with a dry heat, a seemingly slow but progressive eradication of who and what we were as the seat of the personality is decidedly aflame, the frontal lobes, to elaborate it is chronic inflammation and cognitive difficulties including remembering or recall, all when it is of the uttermost importance to remember how one got here, to this point, and how to get out with guns blazing, the occipital lobe, right angular gyrus, parahippocampal gyrus and lateral prefrontal cortex, there is a rise in the concentrations of proinflammatory cytokines and glucocorticoids and a hyperactivity of the hypothalamicpituitary-adrenal axis in response to various threats to homeostasis, no stability here, there, anywhere, the neuroendocrine and immune system, there are thyroid abnormalities present with elevated T4 levels, low T3, elevated rT3, a blunted TSH response to TRH, positive antithyroid antibodies, and an elevated CFS TRH concentration resulting in what feels like another loss in the midst of losses, one's energy, the thyroid, how about the microbial signatures of dysbiosis in the intestinal microbiome with an elevated risk presented by bacteria Morganella and Klebsiella, the ones causing infections in hospital patients, the intestines, but that's too unspecific still, if what we are looking for is some semblance of causality, or responsibility, any inkling of it, really, and we are enflamed, and we are (looking). How about even asleep, the stress-responsive neural systems are on high alert, signalling that it is not safe to relax, which it isn't, because something is burning, or rather, it is all burning, both inside and outside the body (if we are still discerning difference this way), so we go back, and there's the epigenetic changes of our ancestors, the changes in their miRNA expression, covalent histone modifications, and methylation of DNA, and then we are one step further, so how about the bioaccumulation of mercury, lead and arsenic, present in fish and shellfish, mussels and other bivalves, the most widely accepted bioindicators of chemical pollution in coastal and estuarine waters since around 1960, and these compounds bring forth another loss, the loss of traditions of coastal populations and the identity and recognition of oneself that comes with it. Ingesting industrial waste and deep pockets, the soft tissues of shellfish met and meet our own.

We count to 3. Then we count some more.

THE GOBLETS (INFLAMMATION-ASSOCIATED ANOREXIA)

Our brains are running hot, or rather, a specific neural circuit is, it's the inside's inside again, it is running hot in response to a peripheral administration of pro-inflammatory cytokines, such as interleukin-1B or stimulants such as lipopolysaccharide (LPS), and the circuit's neurons light up simultaneously with the whitish fiery glow of a pathway overload, brought on, brought on, fireworks leading to reduced meal frequency whilst IL-1B induces an aversion to novel foods or sucrose solutions altogether, and then what to do, there goes our (food) culture and our self-medicating, what got us through Monday till Friday, to continue even the consumption of sucrose is rendered less pleasurable (anhedonia), and then where to go in search of a little comfort, our brains all fireworks and flames, in clear need, and heat is not it, not by a long shot. It initially caught us by surprise that cytokines are capable of acting on our central nervous systems, as we have been taught that the blood-brain barrier prevents blood-borne pro-inflammatory factors and immune cells access to our brains, but it turns out the immunocompetent cells of our nervous systems are capable at detecting pathogenassociated molecular patterns and of producing pro-inflammatory factors in response to injury and inflammatory challenges, so we shouldn't be surprised that a barrier really is no barrier, even between the blood and the brain, nothing is separate, really, especially when it comes to our bodies, and there is the feeling that we should have known better, and in this moment we do, we understand things are not what they seem and that the knowledge system we base everything on have has cost us, or maybe it is the sucrose self-medicating, or both, but more so what we were never taught, the entanglement and interaction of everything down to its quantum core, so in the midst of this firework of rejection inflamed brains refuse sustenance whilst the world is burning, but who can eat in the midst of a fire anyway, as it is all burning, both inside and outside the body, and it is a cliche to say but still true though, so we go back, we look for environmental factors and an inkling of responsibility or causality, and Dimethylformamide (DMF) is an organic solvent produced in large quantities throughout the world, a colourless liquid used in the chemical industry as a solvent, an intermediate, and an additive, and is readily absorbed following oral, dermal, or inhalation exposure, with air in the vicinity of point sources appears to be the greatest source of exposure of the general population to DMF, the petrochemical sector was responsible for 84% of the reported atmospheric releases, releases from the pharmaceutical industry accounted for 87% of total releases to water as it is used as a solvent in peptide coupling for pharmaceuticals, with more than 40 approved peptide-based drugs in use today, once absorbed in the body it is uniformly distributed and metabolized primarily in the liver with adverse effects, other associated symptoms include nausea, abdominal pain, and anorexia.

We count to 4. Then we count some more.

THE GOBLETS (POST-TRAUMATIC STRESS DISORDER)

Something happened in the past, that plays in the present, and we were also happening in the past, we were there, and something happen to us and now it is present. It recurs, the event, it flares up and bristles, and as such there is something wrong with time, it has come undone in a myriad of spatial and material expressions, it turns out time may never have been chronological after all, but was threaded all the way through with ghostly echoes, and by now what happened to us seems a burnt temporality, even, as it flares and bristles with airborne cinders, and our neurons keep firing, firing, firing, in time, but again, what time, they are confounded and confused by the past not being a pure past staying in the past, and we are too. In the midst of this our bones and muscles start to simmer with a dry fervent heat, bones and muscles, they seem to burn with an inner fire in a slow but progressive process, it turns out is not just time that is unhinged, it is the material too, to elaborate it is chronic inflammation and cognitive difficulties including memory processing, the brain, there is an endocrine dysfunction, the blood and the immune system, how about the microbial signatures of dysbiosis in the intestinal microbiome, the intestines, and even asleep, the stress-responsive neural systems are on high alert, the nervous system, not allowing restorative sleep, signalling that it is not safe to relax, which it cannot be, because something is burning, or rather, it is all burning, so we step back, and even though we would like to say that time itself is the trauma, as it has us drooping to the ground, quite literally, we know our bodies will, and death has always awaited us, and it is known and known, but there is something else, more specific, as bits and pieces are taken from us throughout, pieces of our health and clarity, of time with our families, and the systems we live under, political and socioeconomic, are made for someone else's gain, and most of these come entangled with decisions made affecting our bodies, lifethreatening events, war, assault, abuse and natural disasters, and in 1986 Chernobyl was the site of an uncontrolled nuclear explosion as the No. 4 reactor in the Chernobyl Nuclear Power Plant blew, to this day the health effects of this explosion on the general population are considered 'uncertain', as the entangled effects defy measurement, at least our sort, and there it is, the traumatic event, still recuring, flaring and bristling.

We count to 5. Then we count some more.

THE GOBLETS (OBSESSIVE-COMPULSIVE DISORDER)

We inhale and an interference occurs: a minuscule piece is drawn in with the air, the something or someone starts its passage within the body's cavities and there seems to be no option here for refusal or rebuke, its molecules vibrate in their given receptors and start a downpour of bodily processes, none of which we consciously control. We feel dirty. And with a jolt, we realise there are all sorts of these "others" riding the streams of our circulatory system, conjugating in our intestines, continuously producing and secreting hormones in the endocrine system, and what else, and action is needed. And these thoughts of contamination are intrusive and recurring and we suddenly realise they might not even be ours, really, somehow we are being thought, and there are fires everywhere, such a dry heat, and it seems our inflamed circuits are doing the thinking, they are, to elaborate it is chronic inflammation within the corticostriatal circuitry of OCD, the orbitofrontal cortex (OFC), ventromedial prefrontal cortex (vmPFC), dorsal anterior cingulate cortex (dACC) and striatum, abnormal activity in the brain structure and function related to cognitive deficits in tasks of non-verbal memory, response inhibition, interference control, cognitive flexibility, and visuospatial working memory, the brain, and a dysregulation of our immune function based on alterations in innate and adaptive immune-related parameters such as proinflammatory cytokine levels, antineural antibodies, or hypothalamus-pituitary adrenal axis dysregulation, the immune system, to continue our blood also exhibits peripheral serotonergic abnormalities and 5-HT2A receptor-binding characteristics, the blood, and how about microbiome lower species richness/evenness (a-diversity, Inverse Simpson) and lower relative abundance of the three butyrate producing genera Oscillospira, Odoribacter, and Anaerosipes, the intestines, and even asleep, the stress-responsive neural systems are on high alert, the nervous system, not allowing restorative sleep, signalling that it is not safe to relax, which it cannot be, because something is burning, or rather, it is all burning, so we step back, as we do, looking for the responsible part or parties, or any kind of multifactorial causality, because we don't accept genetic determinism and full responsibility of the individual in mental disorders, they don't get off that easy, those that capitalize on us, how can they, to continue we know the obsessions and compulsions associated with OCD are related to sexuality, aggression, and contamination, and it's the latter that is our struggle, and we understand thoughts of bodily contamination have recurred well beyond Louis Pasteur's germ theory, but we still feel his theory especially contributed to an ontology that retains us as victims, prey in a hostile world living as a separate species in isolation from "others", so let's just start there, with this cultural component, as the continued aetiology takes us, amongst other places, to living in polluted places, especially early on in life, breathing in air containing, amongst other substances, polycyclic organic hydrocarbons, organophosphate flame-retardants, phthalates, benzothiazoles, musk compounds, plasticisers, lead, nickel, cadmium, arsenic, and magnetite, and there is an overlap here with a risk of neurodevelopmental disorders with an obsessivecompulsive disorder comorbidity, and someone is making a buck, and someone else is allowing it to happen.

We count to 6. Then we count some more.

THE GOBLETS (GENERALISED ANXIETY DISORDER)

Fear is a basic biological process, and we are scared of the fire, we are. We are scared of ourselves, us, of who and what we are in the face of adversity, as we are in the midst of adversity, and the amygdala, heavily connected with cortical regions including the limbic cortex, is working to formulate and retrieve emotional and fear-related images with input from the hippocampus, thalamus, and hypothalamus, tumultuous projections of the present, past, and future, all run by fear, and it is all coming and it already happen and it is here. And alas, we are here, us, in the face of stressor exposure, with a downpour of bodily processes not to be consciously controlled, and the issue was already negative experiences that were unpredictable and out of our control, and what else is new, certainly not negative feedback loops, and it's called emotional hyperreactivity with amygdala hyperresponsivity and reduced tonic parasympathetic activity (i.e., reduced heart rate variability) along with greater tonic sympathetic activity levels, with implications for higher resting levels of emotional arousal and greater sensitivity to affective shifts from a neutral or relaxed state to one that is negative, and there we are, in adversity. To elaborate, it is chronic inflammation leading to, in a range of processes, cognitive difficulties including information processing, the brain, on adversity, and our blood harbours serotonin, brain-derived serum neurotrophic factor, cortisol, and microRNA, the blood, to continue the saliva holds markers of cortisol, lysozyme, andaamylase, the saliva, and how about the microbial signatures of dysbiosis in the intestinal microbiome with an overgrowth of bacteria such as Escherichia-Shigella, Fusobacterium and Ruminococcus gnavus, the intestines, and even asleep, the stress-responsive neural systems are on high alert, the nervous system, not allowing restorative sleep, signalling that it is not safe to relax, which it cannot be, because something is burning, or rather, it is all burning, so we step back, and there's the epigenetic changes of the forefathers/mothers, changes in miRNA expression, covalent histone modifications, and methylation of DNA, and then we are one step closer, perhaps, as fear, it turns out, can leave permanent epigenetic marks on DNA, marks to be passed down to offspring, as the experiences of a parent, before even conceiving offspring, markedly influence both structure and function in the nervous system of subsequent generations, and there are so many events to choose from, lifetimes of systemic violence and aggression and hierarchical thinking and Cartesianism and what not. Acts of war, poverty, disease, and fire, and why we call it a disorder, this recurring anxious state, and not just the order of things, as they are and were, is sometimes hard to know, but again, who knows with this burnt brain, and DSM-5 probably knows better.

We count to 7. Then we count some more.