

# Health punk vol.2

FICTION  
+  
HEALTHCARE  
+  
YOU



ENVIRONMENTAL  
PHYSIOTHERAPY  
ASSOCIATION



## **EDITED BY**

### **Filip Maric (PhD)**

Associate Professor, Department of Health and Care Sciences  
UiT The Arctic University of Norway. [filip.maric@uit.no](mailto:filip.maric@uit.no)

### **Liv Johanne Nikolaisen**

Programme Lead Physiotherapy Bachelor Program  
UiT The Arctic University of Norway

### **Mahitsonge Nomusa Ntinga**

Lecturer, Division of Physiotherapy  
University of Cape Town

### **Jena Webb (PhD)**

Community of Practice in Ecosystem Approaches to Health (CoPEH-Canada), Canada

## **PUBLISHED BY**

[www.environmentalphysio.com](http://www.environmentalphysio.com)



## **GRAPHIC & ILLUSTRATION BY**

[www.miucreative.com](http://www.miucreative.com)

## **ISBN**

978-82-692170-3-2

**PROLOGUE**

How do you do something you have never done before?	4
---	---

**HEALTHPUNK**

Time	10
Embodied Case History Assessment: A new era of empathy	14
If we could turn our emotions into light	18
Soigner les nouveaux centaure	24
Caring for the New Centaurs	26
Utopioita genitaalisilta rajapinnoilta: Entä jos lantionpohjan terveys otettaisiin tosissaan?	28
Utopias from the Genital Limits: What if pelvic floor health was taken seriously?	35
A note to future bodyworkers	42
Futuros ancestrais: as cantadoras de histórias	47
Ancestral Futures: The Story Singers	53
Night swimming	60
Homo sapien	62
The Stand	69

**COMMENTARIES**

Relational becomings and ethical practices	73
Easier to imagine	81
Science fiction: A healthy preoccupation?	85
Embracing the Unknown	90

**EDITORIALS**

Als Physiotherapie noch in der Praxis stattfand: Wie Umwelt und Soziales nachhaltig die Physiotherapie verändert haben	92
When physiotherapy still happened in the clinic: How society and environment changed physiotherapy for good	101
Therein lies the hope	109

## PROLOGUE: HOW DO YOU DO SOMETHING YOU HAVE NEVER DONE BEFORE?

By Filip Maric, Liv Johanne Nikolaisen, Mabitsonge Nomusa Ntinga, Jena Webb

**Како писати на начин на који никада раније нисте писали?**

*Uyenza kanjani into ongakazeh uyenze ngaphambilini?*

**Hvordan tenke på noe man aldri har tenkt på før?**

*Comment imaginer quelque chose d'entièrement différent de ce que vous connaissez et pouvez voir aujourd'hui?*

These are the questions we are faced with as healthcare students, professionals and colleagues setting out to engage in healthpunk. The preface to any answer, if we ever arrived at one, would have to be that it is not easy.

This, at least, is what we have experienced in working through the different stages and tasks involved in the creation of this new collection of stories in Healthpunk Vol 2: Fiction + Healthcare + You. And it has been as true for the writing of healthpunk stories, as it has been for the writing of commentaries aspiring to something beyond peer review, and even for the writing of different openings and editorials that could frame such

a collection.

To take an example from the physiotherapy program from which these collections originated, we have, this year, been struck by the difficulties that come with encouraging students to give free reign to their imagination for more socially and environmentally responsible healthcare futures. Almost nothing inside a physiotherapy education program invites, let alone prepares, physiotherapy students to imagine their future profession beyond the exact image that they have of it before they even begin to study. They come to us precisely because they have a clearly defined image of physiotherapy, predominantly revolving around individually oriented musculoskeletal rehabilitation. And for the most part, that is what we deliver.

Against this backdrop, it can feel like a near magical achievement when students' image of physiotherapy gradually expands to include, for example, paediatric, neurologic, cardiopulmonary, or palliative physiotherapy. But even amidst this



broadening of perception, social and environmental challenges rarely make the cut. They are often even resisted, by students and teachers alike, for allowing them in implies a deeply uncomfortable disturbance of that very image and reason-for-study-and-practice of physiotherapy, if not its disintegration beyond the point of recovery. It seems more comfortable to turn our back and claim 'That's not physiotherapy!', with all the cognitive and affective gymnastics this might entail, than to admit and consider how profoundly social and environmental challenges affect the health of the very people we are meant to work in service of.

*Everything I let go of has scratch marks all over it.*

Decide for yourself if these 'imagination challenges' resonate with experiences related to your own healthcare profession or preferred brand of planetary, eco, one, sustainable, geo, more-than or other health (Gabrysch, 2018). Whatever stance you have, the first challenge in the way of doing something we have never done before, be it even just writing in a way we have never written before, is letting go of how we have done things before. We must get lost, though this is usually neither accomplished easily nor quickly, if at all (Akomolafe, 2015). And it is compounded by the second challenge, which consists in envisioning the new, a view that is, in turn, all too often obscured and ridiculed by the seemingly sober (but dissociated) pretext of pragmatism.

*But it's not realistic. You're being foolish. It can't be done. It's not how the world works.*

Here, fiction as a catalyst for imagination presents itself as the paramount means for overcoming the twofold challenge of letting go of a dominant status quo and envisioning alternative futures. Writing fiction, or just diving into writing fiction irrespective of prior experience, can enable and embolden us to imagine the new. And, in so doing, it helps us leave behind a world that is not working as well as that pragmatism of the realistic would have us believe.

'Sometimes you have to imagine in a radical way that makes you seem a little crazy, that puts you in an embarrassing light, in order to open up a possibility that others have already closed down with their knowing realism' (Judith Butler, in Gessen, 2020)

Not just sometimes though. Today. The arguably 'knowing realism' and the status quo it upholds – how we have done things so far and the stories we have told ourselves in this doing – are what got us to where we are today. But where we are today, the near-normalized 6th mass extinction, the climate crisis, yet another prolonged war, increasing radicalization, global air, soil, water, and plastic pollution, the drying out of riverbeds, the flooding of 1/3 of a nation that barely breaks the news, and countless other such crises, is clearly no longer tenable. In the face of this status quo, the only pragmatic approach is to recognise that we need to find entirely new ways forward

and that we need to write the stories that will help get us there. In *The Great Derangement: Climate Change and the Unthinkable*, Amitav Ghosh succinctly summarizes the pragmatism of fiction today:

‘...the great, irreplaceable potentiality of fiction is that it makes possible the imagining of possibilities. And to imagine other forms of human existence is exactly the challenge that is posed by the climate crisis’ (Ghosh, 2016)

But we can speak even more boldly about the importance of this kind of fiction and the flavour of imagination that we need today. Far from being a waste of time or romantic escapism, we need new stories because ‘stories are compasses and architecture; we navigate by them’ (Solnit, 2014). For better or worse, stories guide and inspire our actions. Like that tale of a healthcare profession for which creative writing is just too childish. Or that emerging story that society and environment are, after all, something to care for if the health of people and planet is what we are after. Or that age-old ‘I am better than you’ story that is keeping us from truly coming together in solidarity. Or that story that money makes the world go round that suffocates the alternate narrative that we must care for each other. The story that the only stories worth hearing are told in words, or one or another language. That story that there is no time for telling stories that quenches the connections and radically new ways forward that can only be told as stories to begin with.

As the editors of *Healthpunk Vol 2* we are deeply grateful for all the courageous stories that have been sent to us in this spirit and the way they might help us navigate to new places and new ways of doing things. Taking us out of the ordinary in an instant, the removal of time opens the door into a new world in which new technologies enable new assessment and treatment approaches, but also new problems to attend to. In this world, emotions might become a source of energy, and are recognized for always already having been that. Old connections to other species are reinvigorated, while antiquated taboos inhibiting health are finally laid to waste. New conditions require us to (body)work in entirely new ways, while the returning of land to indigenous peoples gives way to improvements in equity, justice, health, ecosystem integrity, schooling and more. And just as returning land to people prompts a cascade of improvements, so does returning health and healthcare as a common good, free to be shared by and exchanged with all. Indeed, health is recognized as not even belonging to humans in the first place but is made possible thanks to our close relationships with the sun, the earth, and the different beings we share it with. And so, it is also their sadness over our current crises that needs acknowledging, and their losses and their health that we need to remember as we seek to strengthen our mutual bonds.

The four commentaries that have come together for *Healthpunk Vol 2* pick up the themes in the stories and carry them forward through further

reflection about the necessary transition from individualism to relational becoming, the need to imagine our way out of capitalism and embrace the unknown, and the importance of stories to accomplish all of this. Finally, the editorials represent two of our modest attempts to do at least a little bit of what we are asking of our fellow Healthpunks ourselves, reflecting on what more socially and ecologically responsible Eco/healthcares might look like at

different scales, from more fully participating in the world, to the worlds immediately around and within us. But neither the stories, nor the commentaries, or presumed editorials lay claim to presenting a final answer on the way forward. If anything, we hope they will inspire you to get lost, seek and tell stories of your own that might help us navigate towards that otherwise health and care that we need today.

## REFERENCES

Akomolafe, B. (2015). Getting lost. Available from: <https://www.bayoakomolafe.net/post/getting-lost>

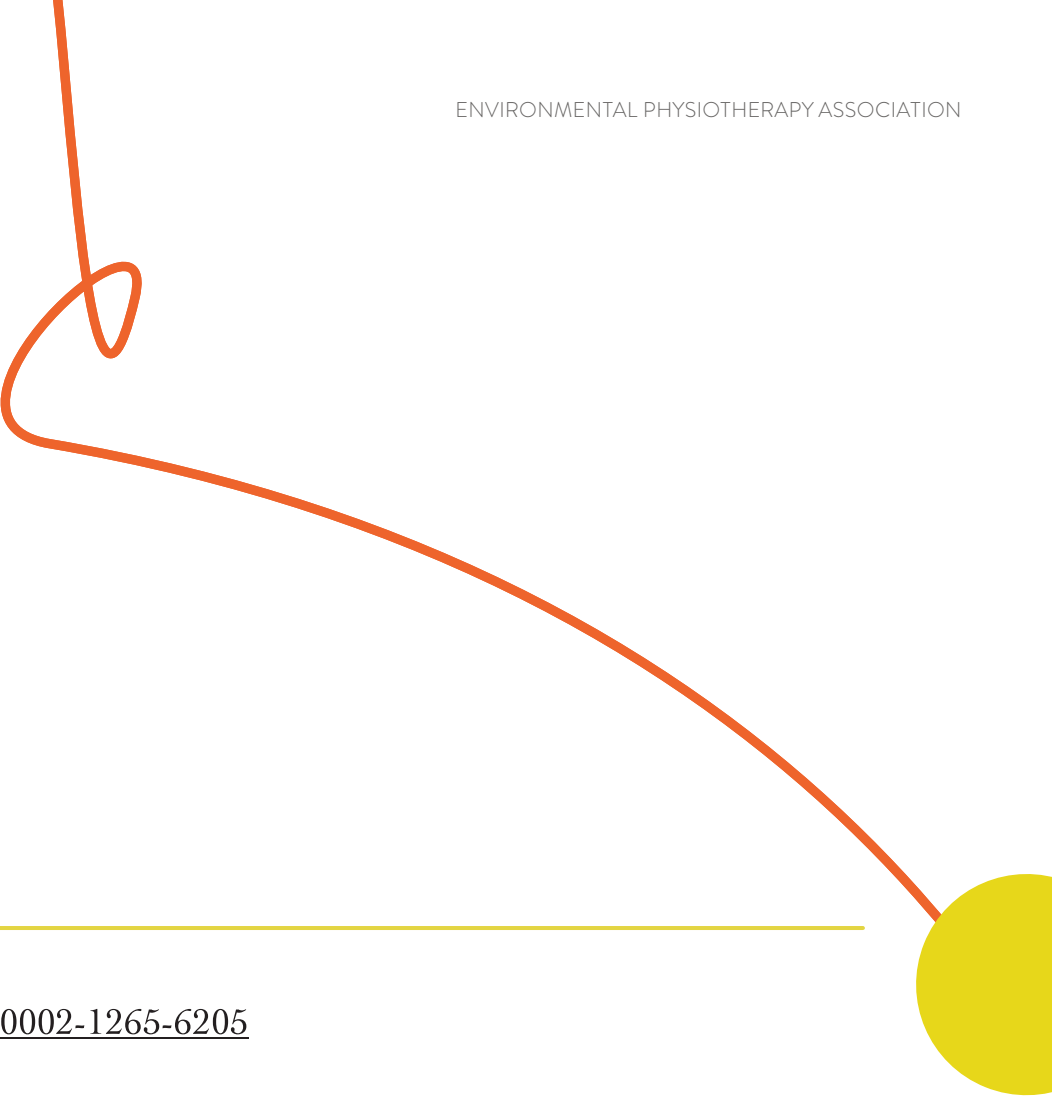
Gabrysch, S. (2018). Imagination challenges in planetary health: re-conceptualising the human-environment relationship. *The Lancet Planetary Health*, 2(9), e372–e373. [https://doi.org/10.1016/s2542-5196\(18\)30169-4](https://doi.org/10.1016/s2542-5196(18)30169-4)

Gessen, M. (2020). Judith Butler wants us to reshape our rage. Available from: <https://www.newyorker.com/culture/the-new-yorker-interview/judith-butler-wants-us-to-reshape-our-rage>

Ghosh, A. (2016). *The Great Derangement: Climate Change and the Unthinkable*. The University of Chicago Press.

Solnit, R. (2014). *The Faraway Nearby*. Granta Books.





---

**Filip Maric<sup>1</sup>**  
<https://orcid.org/0000-0002-1265-6205>

**Liv J. Nikolaisen<sup>1</sup>**

**Mahitsonge N. Ntinga<sup>2</sup>**  
<https://orcid.org/0000-0002-9725-9312>

**Jena Webb<sup>3</sup>**  
<https://orcid.org/0000-0002-5763-3381>

<sup>1</sup>UiT The Arctic University of Norway

<sup>2</sup>Physiotherapy Division University of Cape Town

<sup>3</sup>Community of Practice in Ecosystem Approaches to Health  
(CoPEH-Canada), Canada

*Contact:*  
[filip.maric@uit.no](mailto:filip.maric@uit.no)

---

**SUGGESTED CITATION:**

Maric, F., Nikolaisen, L. J., Ntinga, M.N., & Webb, J. (2022). How do you do something you have never done before? Open Physio Journal.

<http://www.doi.org/10.14426/opj/202212hp0201>



# Health punk



## TIME

*By Meri Westlake*

Everyone is trying to get more time, to live longer, gather more money or resources, or power. And when biology finally comes ticking, people seek more time through infamy. A desire to live forever meant losing sight of what's here and now. We became so anxious of the future, we forgot the present. Try to think back and remember the period between flights on a long layover. A lawless sense of passing, it's limbo with fluorescent lights. Imagine that sense applied to life. There's suddenly all the time in the world.

In previous times, the world was run to measures. Time, it seemed, was the most logical division by which to slice up existence. A highly curious choice given the cyclical nature of life. What seemed like entire forests' worth of paper and ink was dedicated to defining how to use time to its maximum. It was exhausting running from time, knowing the average human lifespan. The competition to do things the fastest, the moral injury of the "treat and yeet" crazed healthcare system, and the race to simultaneously end climate change while concurrently destroying the rainforest for next day delivery.

Time, it seemed, fuelled the constant background panic of FOMO. It translated into columns and programs on how to squeeze the last drop of production from every nanosecond. How to use the gold dust that was hours of annual leave in the most efficient way possible. How many days something loved might expect to live well. What was the acceptable number of weeks to feel sad for? The months passed between a spark and a fire starting. The quality-adjusted life years we may stand to gain from one intervention or prevention. The terms of leaderships to celebrate or endure; the decades of prosperity or austerity; the centuries of progress or destruction. Time, seconds, minutes, hours, days, weeks, months, years, decades, centuries, millennia. Ultimately, to quote a long past singer "everything emptying into white<sup>1</sup>," but now there is no red-legged chicken here ready to strike.

My fascination with time emerged when considering the parameters of "prolonged bed rest." How long was prolonged? Was it standardised across all ages? Contexts? Conditions? Expectations of outcomes?

<sup>1</sup> Cat Stevens



Did prolonged really matter if there wasn't a unit of measurement for length of stay i.e. days or hours? In context, the pondering also coincided with the pilot reduction to a 4 day week. The same money for fewer hours, success will be measured by increased productivity. Why, I shrieked internally, what was the bloody obsession with productivity. As if it was possible, nay, desirable even to draw the maelstrom of collective experience into a neat equation: productivity = work done divided by time. At least they noted there were some sparkly secondary objectives - people might feel better, fewer commutes mean less carbon produced. They might even have a scrap of time to spend just being themselves, although productivity as the primary outcome still meant people measured themselves by how much they got done in the new time. Things like taking on a side hustle project, upgrading soft skills and languages, and grinding away at an unrealistic ideal of beauty.

But as I said, this is a world without time and the one downside is a lot of missed meetings. So let's take a movement through life post-time while I enjoy my bounty of a moment alone.

## DEATH

It used to be a sucker punch to your soul moment. Time of death...

Closely followed by a time and date to collect their things, go to a funeral, grieve, to have moved on. In a world without time, psychiatrists and psychologists (pop or otherwise) can no

longer draw blood in declaring one's mourning to now be of a length that is undesirable (read: your boss wants you back at work, the economy is tanking and that thing won't do itself, even though it probably would, GO GET THAT MONEY).

Similarly, without weeks, right-to-life advocates and pro-choice advocates have no battleground to draw a line in. A person carrying finds out when they find out and makes a choice at that time. It's a present-based decision with a little mix of the future(s) available. Certain sects remain hot under the collar, raging justice for the unborn. Other parts of the sect realised the battle for life lay beyond the first foundations and set about generating the social conditions needed to make childbearing the experience it could be. They became virtual dragon slayers to all that questioned the parents' choices around childrearing, such as feeding, sleeping, and discipline. Wars still wage around vaccinations and neurodevelopmental disorders. Yet, when there is no arbitrary line of progress, eccentricities are embraced. No longer does the line deviate, instead, it adds many threads to a Pandora's Box-like tapestry.

## WORK

Taylorisation and efficiency metrics drove us to the brink of complete social destruction. Work now means completing things that fulfil us but contribute towards maintaining shared assets such as food sources, power sources, life, health, education and all the things governments

promised to make better but never quite got around to given that the years between being elected and getting re-elected seemed too short to achieve anything embedded. But us non-politicians were expected to have changed our entire lives and fortunes in the same years. Once time is removed - it becomes about being and doing rather than running down a clock to a final stop. Bullshit jobs for the sake of jobs disappeared. Even the most money-deranged elites worked out that if there was no time, there was no money. Plus, universal basic income sorted out some of the

raging disparity. Age-ism dropped almost overnight

as wisdom and experience became the greatest asset. No years meant no ages, meaning no grand retirement parties and no sly terminations by age proxy. Society did bristle uncomfortably through the teething phase of balancing 'tried and tested' with novel approaches.

But, without time there can be no greedy bosses winding back clocks to return to the 16-hour days of yesteryear without the consent of the workers.

## EDUCATION

We don't need no education, teacher leave those kids alone<sup>2</sup>.

Few people now, baring the niche historians, will recall the concept of school years and term times. Without the mantle of achieving a government-mandated basic level of education (questionable), the focus has shifted to nurturing skills and interests. Learning is like everything, a collapsing cycle, but at least this one collapses outward. Parents start introducing their offspring to whatever they have to hand, and the village does the rest. Kids are no longer labelled lazy, after all - lazy is a time-based concept, a lack of expected achievement within a time period. Returning to the historians, they are treated a bit like mini rock stars. We have taken cues from our indigenous populations and embraced history as verbal and living (with a little bit of writing things down). The past is measured by major events often linked to our environment- great floods and fires. Things that really change places.

## PLAY

HE'S DONE IT, HE'S SCORED IN THE DYING SECONDS OF EXTRA-TIME TO WIN THE WORLD CUP

How many times has this been shouted? Currently, you'd be looked at as if you'd gone a bit loco. But when play is not about divisions of work, rest and a termination time then the purpose is open to whatever the person makes of it. If you want to play, if you need to play, then play. There is no pushbacks or kick-offs, no playing for time. It's about the experience, satisfaction and effort, if you want it to be.

<sup>2</sup> Pink Floyd

## MOVEMENT

Teleportation solved the public transportation and climate crisis. Seriously. When objects aren't fixed to their present location with a "time" barrier between them and something else, no schedule is needed, therefore no painful waits for a bus that's never coming to take you on that date, that, while awful, gave you a great story to dine out on with friends over shared food.

## ENVIRONMENT

When time stopped we moved back into the rough, wandering cycles that have defined us for the stretches before the clock. Plants always had it right, a season or come back? The panic stopped when there was a collective pause, without dates and flashy deadlines it really did become about making things better for all of us before our collective cogs popped. We no longer put off tending to the vegetables, the list of must-dos, the desire for frolicking and connection. Unstructured doesn't mean unused, it certainly doesn't mean taken for

granted either. No longer tied to carbon-hungry air or sea miles, seasonal and climate-specific foods can be enjoyed where and when they are best. If there ever was an advertisement for integrated cultures, the experience of food at its best comes incredibly close to perfection.

So what do we use to measure change? Mostly description with a healthy dose of contextual salt. There are but three times here now - present, past and future. Without measuring time we are now able to live communally in the present. In the long run, we are all dead, in the short run we need to thrive. A world without time means some surprises, it also means living within where you are. People are surprisingly kind when there is no chance to be inconvenienced temporally. It's almost as if, without the yardstick of time, what really matters comes through. There's no competition here, no league tables of fastest, no intentionally sabotaging delays. It's idyllic, so long as you stay put for the moments that matter most.

---

**Meri Westlake**

<https://orcid.org/0000-0002-7060-1421>

University of Nottingham, National Rehabilitation Centre

*Contact:*

[meri.westlake1@nottingham.ac.uk](mailto:meri.westlake1@nottingham.ac.uk)

---



# EMBODIED CASE HISTORY ASSESSMENT: A NEW ERA OF EMPATHY

*By Bonnie B.Y. Cheng, Lisa Anemaat, Peter H. Worthy*

“Why am I signing this?”

It had been 18 months since the EmCHAT was rolled out, and another six since the contentious and repeatedly-revised consenting process was finally deemed acceptable. To be fair, the whole idea of the Embodied Case History Assessment Tool was contentious from the beginning.

Since the early consultation phase of our co-design project, people were not receptive to the idea of letting their doctor have an embodied experience of their disability using DETech. Our vision for this new approach to conducting case history assessment was to challenge the notion that one can have empathy for another without first walking a mile in their shoes, so to speak. For centuries, clinicians have relied on soft skills to breach this divide: fostering rapport with each individual patient as well as their significant others; treating not just the impairment but its unique impact on someone's capacity to function and participate in a way that's meaningful to them. Still, study after study has continued to uncover

people feeling that the healthcare they received, whilst medically sound, missed seemingly innocuous, health-related changes that disabled them in their life. The socially ubiquitous Digitised Embodiment Technology, paired with the momentum of the anti-ableism movement, presented a promising solution.

We had anticipated that people would endorse, even embrace, the use of DETech in a healthcare context. But, this was not the case – a surprise exceeded only by the unexpectedness of my own unease with using EmCHAT when our team resorted to self-piloting the tool after a fruitless effort to recruit volunteers. It wasn't until I used the EmCHAT myself that I felt, rather than just understood in principle, the invasion of privacy, the vulnerability, and the loss of agency in letting an unfamiliar other live your life; to let them be in your body and in your mind so that they can see what you see and feel what you feel in order to know, if only momentarily, what it's like to live as you. The irony was not lost on us that it was an embodied experience of using the EmCHAT that gave us a vivid and holistic appre-

ciation of using the tool that promises to give patients a way for others to vividly and holistically appreciate their lived experience of disability. Yes, I had consented, and it was undeniably informed, yet I felt violated.

The other surprise – after we had successfully demonstrated that the benefits of embodied assessment outweigh the risks – was that instead of doctors, allied health professionals were the ones who patients and families felt comfortable trialling EmCHAT with. There is no doubt that doctors are respected, and for good reason they are also trusted by many patients and families desperate for a lifeline out of illness. But, in the days, weeks, months after a doctor has treated a patient, it's an allied health professional who journeys with the patient through their losses, big and small, their gains and setbacks. It's an allied health professional who grieves with the patient and their family, who celebrates with them, and who offers the right words to the right person when they need it most. This is what makes their rapport, unquantifiable as it is, therapeutic. A doctor may be a beacon of knowledge, but an allied health professional can be a beacon of hope.

EmCHAT is amazing technology. By occupying the gamut of rooms and alcoves of a person's mind, you suddenly see and feel their shape-shifting but ever-present collision of anger, sadness, shame, triumph, joy, and yearning for belonging. By experiencing someone else's experience as your own, your reality is altered and so too are your filters and

interpretations of what, why, and how. In this way, EmCHAT is more than just a window into someone's lived experience. It's scary. And to be honest, each time I witness a consent signing, I wonder whether the patient can fully understand what the most carefully written form could not convey.

There have been times with a patient when I've transiently and subtly felt feelings and sensations that I know aren't mine but theirs. The trace effect, as we call it. Even though EmCHAT operates strictly on the basis that experiential knowledge is erased from the clinician's mind as soon as a management plan is determined, traces of psycho-emotional or sensory impressions can remain in the clinician and be spontaneously triggered.

In these moments, I know the parts of the patient's experience they've left unspoken. That knowledge gives me confidence in making their treatment more personalised, but it also gives me pause about an ethical conundrum that can neither be solved nor dismissed. That is, how should I use this knowledge... or, should I? My legal and professional responsibility tells me to use this knowledge in the patient's best interest, but who's to say what the patient's best interest is? Who's



to say why they left these parts of their lived experience unspoken? Maybe, the same technology that offers clinicians a means to more comprehensively know, robs patients of their right to voluntarily disclose.

“It says here, in the event of an emergency we can instantly terminate EmCHAT,” my patient announces, her furrowed gaze and finger hovering over that line on the consent form, askance.

“That’s correct.” I feel a sharp pinch in my lumbar spine, a trace effect from a patient who had a slipped disc. Today, this pain makes me flinch at the thought of administering the EmCHAT again. Though it’s not explicated in the patient consent form, the emergency termination function was designed as much to protect patients as it was to be a safety measure against the occupational health and safety hazards of administering the EmCHAT.

“Right, so if you had a heart attack during this thing, I won’t have to suffer with you. No offense.”

“None taken,” I assure her, knowing that the EmCHAT poses a statistically higher risk of harm for the clinician than it does for the patient.

We knew these solutions weren’t perfect. No solution ever would be. But we hoped that our team of lived experience and design experts would be up to the task of ongoing project development and evaluation. We hoped that our iterative work would continue to grant us insights not just to make EmCHAT better and safer,

but to inform the development of ShCHAT. The ShCHAT would enable a clinician to virtually shadow a patient, as an alternative to embodying them. It was a brilliant idea generated by our lived experience reference group. Granted, having heard clinicians awkwardly pronounce the abbreviation, we might need to come up with a less crude sounding name.

“Ok, let’s do it,” my patient said. Let’s do it, I thought.



---

**Bonnie B. Y. Cheng**<sup>1,2</sup> (corresponding author)  
<https://orcid.org/0000-0002-3433-8486>

**Lisa Anemaat**<sup>1,2,4</sup>  
<https://orcid.org/0000-0002-9124-1330>

**Peter H. Worthy**<sup>1,3</sup>  
<https://orcid.org/0000-0001-7410-4652>

The University of Queensland, Australia:  
<sup>1</sup>School of Health and Rehabilitation Sciences  
<sup>2</sup>Queensland Aphasia Research Centre  
<sup>3</sup>UQ Centre for Clinical Research

The University of Queensland and Metro North Health, Australia:  
<sup>4</sup>Surgical Treatment and Rehabilitation Service (STARS) Education and Research Alliance

*Contact:*  
[bonnie.cheng@uq.edu.au](mailto:bonnie.cheng@uq.edu.au)  
[l.anemaat@uq.edu.au](mailto:l.anemaat@uq.edu.au)  
[p.worhty@uq.edu.au](mailto:p.worhty@uq.edu.au)

---

# IF WE COULD TURN OUR EMOTIONS INTO LIGHT

By Jiameng Xu

*CBC News – August 17, 2053*

*A Level 5 atmospheric surge is projected to fall over the Metro Vancouver area starting at 8:17pm PDT today.*

*Health and Safety Authorities are recommending evacuations to residents in the lower-lying regions. Officials are recommending that all other residents shelter in place and await further updates.*

*Local curfew has been placed forward to 5 PM.*

*Power checkpoints throughout the Lower Mainland, including Greater Abbotsford and New Hope, are projected to be submerged within 24 hours of onset of rainfall.*

Sophie's earliest memories were of her mother holding her. In the dark room, Sophie could only just make out the faint outline of her mother's face brushed by moonlight, the dim glimmer in her eyes. After the power curfew at 6 o'clock, when the hum of their five-storey apartment building ceased and gave way to silence, Sophie would take her mother's hand

and lead them towards the window. She would press her hands against the glass, her fingers tracing the pinpoints of light at the tops of distant hills. She pictured families living in the houses there, cooking, watching television, reading long into the hours of the night; families that could afford the surcharge on energy in a world depleted of it.

"Others have electric lights," her mother would whisper against her cheek, "but we have the moon and stars."

Tonight, her mother spoke of the lights that existed during her childhood. Candles on birthday cakes, and the muted glow of street-lamps. Lanterns in the garden, hanging from trees in the summer-time; and at Christmas, red, green, and white bulbs adorning roofs and evergreens, their brightness making the winter twilight seem more profound.

"Do you think the lights will come back?" asked Sophie, gazing at the shadows in their neighbours' darkened apartments.

"I believe the Earth will forgive us," her mother replied. "I believe the Earth will see that we are trying to change."

*The term "atmospheric surge" was coined five years ago to extend the phenomenon of "atmospheric river," the result of a sudden and high-volume atmospheric conduit carrying vast amounts of moisture from the Pacific Ocean onto land.*

Paul was thirty-five when Ramirez and Yao patented what they hailed as a personal solution to the global energy crisis. A thin, blue piece of metal bent in a circle and worn around one's wrist or ankle, the Gaiaband's design originated from the skin conductance monitor, transducing the myriad electrical pulses generated by the human nervous system into storable energy. Wearing a Gaiaband for 12 hours was sufficient to power a range of 12-volt appliances: a LED reading lamp for two hours, a cooking element for thirty minutes, a cooling fan for forty-five minutes. Soon after the first version of the Gaiaband flooded the markets, the federal government partnered with the company to make the device, and a suite of compatible appliances, available to every individual aged fourteen and older.

Paul was forty-two when he arrived in Vancouver. The floodings, though intermittent, were occurring with increasing regularity and intensity, opening up an industry centred around the dismantling of damaged homes by the seaside. New to the city, Paul could not afford the high rent, nor did he qualify for social

housing; after the work day, he returned to the houses where he had spent hours salvaging for wood, plastics, and metal, and went to sleep on hollowed out floors. There he felt safest, even more so than when he would later move into a small apartment opposite a girl and her mother, for those roofbeams that have already survived a storm gave him the sense of protection he craved.

And later, after a psychotic episode following cocaine use, Paul came back to these forgotten houses to protect others from himself.

*Many supermarkets, food banks, and GaiaDepots are reported to be nearly empty across the Lower Mainland, with some residents travelling hours from their homes to procure supplies.*

Sophie inspected the angle of the last solar panel she had placed by the window, positioned just so to catch the mid-afternoon sun. Satisfied, she moved on to fasten each panel to the other with insulated wire, forming a parallel circuit just as her mother had shown her.

It had been three months since Sophie's mother left. Or disappeared, as a voice in Sophie's mind sometimes whispered. She had found no note, only her mother's Gaiaband, faded blue on the chipped white kitchen table next to a wooden crate of insulated wires, solar panels, and rechargeable battery units.

Since Sophie turned nine, her mother began to teach her how to set up a miniature solar panel farm over every

available surface in their cramped apartment. Every few weeks or so, more panels and battery storage devices materialized from her mother's scavenging trips to local scrapyards or the municipal garbage heaps. She spoke of an oncoming storm, the greatest of their lifetimes, of distant relatives to whom she had made pledges, and whom Sophie had ne-ver seen.

Stacking one last battery unit atop the tower nestled between the wall and the kitchen table, Sophie stood up from her crouched position and took from the tabletop a bouquet of peonies. She carried them across the hallway into Mr. Paul's apartment.

In a room that was as bare of objects as her own was full, Sophie set the peonies next to the sink. She picked up a sandwich placed on a strip of brown paper, lettuce and ham squared with the bread. Beside it was a small bar of soap, unwrapped, and a plastic dish. Pocketing both items, Sophie took out a pen and wrote on the brown paper:

*Dear Mr. Paul,  
Thank you for the sandwich.  
Please accept these peonies.  
They are for you.  
Dan's mother gave everyone in my  
class a few.  
She said the big storm is coming and they  
won't last anyway.  
Please come back.  
I forgive you.  
Sophie*

The regional authorities urge family units to shelter together, if possible,

and those living alone to shelter with a neighbour. Children, the elderly, and persons using substances are particularly vulnerable; the Vancouver Police Department has tracked a sharp increase in individuals overdosing over the past seven days. "If you are planning to use," Chief Merrilee Gilchrist urges, "do not use alone."

When Paul first took cocaine, it was to seek refuge from the cold.

He sat huddled in a tent with a couple and another man. The canvas roof was waterproof enough to keep them dry from above, but rainwater was seeping onto the floor of the tent. Paul's boots were already worn through at the soles by the time he got them. He had never felt so cold.

"This will help," the woman beside him said, passing a bag of white powder. "Make sure you have your Gaiaband on – you'll get some extra power out of this."

"It's another way of harnessing our emotions," added her partner. "If we're going to be feeling anxious, angry, depressed anyways, might as well channel that energy. We're not just getting a high anymore – would be a shame to let it go to waste."

Paul had heard of people using external stimuli to augment one's emotional state to generate more energy with the Gaiaband, from watching funny, frightening, or sad movies to staying up all night to consuming certain substances. Joy, fear, anxiety, relief – these emotions of surviving, of bearing witness to



a present straining to keep up with an unpredictable climate, were perhaps the most inexhaustible energy sources of all.

The tap tap tap of a seemingly never-ending rain burrowed under Paul's skin, the deluge threatening to close in but never seeming to arrive.

He was tired of feeling so, so cold.

*Authorities say they cannot predict with certainty the intensity nor duration of this atmospheric surge. A comparable event was the storm of 2051, which killed 103 in Metro Vancouver, displaced an estimated 15,000 across British Columbia, destroyed bridges and highways throughout the Lower Mainland, and left 40,000 households without power for four weeks.*

Through her mother's stories, Sophie remembered the first of the great storms.

"The rain kept falling for five days. You could hear it all the time against the window, on the roof. The clouds were so thick that the sun never appeared.

Morning and afternoon lost all meaning because the light never changed in strength, remaining muted until suddenly you knew it was night. Those nights felt like no light could ever cut through them. And through it all the only constant was the rain."

At school, Sophie learned about the storm's aftermath in her geography textbook. The Coquihalla Highway collapsed, prostrating under its own weight. Farmland overlaid with floodwater, heavy and opaque with silt. The water rose until only the roofs of houses were left uncovered as colourful squares, seemingly afloat on a muddy sea.

Sophie did not tell anyone that she and her mother were thrown into darkness each night after the power curfew because they could not afford the energy surcharges. That sometimes for weeks on end the only foods they ate were those that kept well when cold and uncooked. That she woke at dawn to finish any homework not yet completed, her eyesight adjusting to the growing light with each passing, precious minute. And at night her mother whispered to her the lessons she remembered from her own schooling, both drawing comfort from the memory of certain facts that have withstood heat and water and wind. On particularly rainy nights, music from Mr. Paul's bedroom wafted into their apartment like a smell, foreign and warm. Sophie was soon able to tell apart the strains of a harmonica from the twanging of a guitar and later, by the key changes and tempo, the direction of the next note.

But on one spring night, against the noise of hail hitting the window, the sound of instruments was replaced by Mr. Paul's shouts and banging on their door.



"You have to get out of there – it's not safe – there's a cave in the mountains –"

"Paul, I don't understand, we are safe here, the hailstorm will pass," her mother shouted back. Then, after a pause, "Did you take something?" "The cave – you have to go –"

"We are fine here – the storm will pass soon, the storm will pass soon," said her mother over and over, her palm upon the wall.

Minutes passed. The sound of knocking ceased. On every night thereafter, Sophie heard only silence from the other side of the door.

*"We recommend everyone check up on the vulnerable," says Vancouver mayor Simreet Singh. "Look upon elderly individuals. Look upon your neighbours. Share food, share water. Stay safe. Look after each other."*

The day Sophie's mother left, Paul gave Sophie the keys to his apartment.

"You can come in here to take whatever you need, alright? There will be groceries in the fridge for you every week. Toilet paper and other supplies."

"You don't have to," said Sophie. "I'll be OK, I promise."

"Your mother asked me to," lied Paul. "Just keep going to school, alright?"

After Sophie returned to her apartment, Paul took a pillow and blanket and stuffed them into a backpack. He took two busses to get

to the dilapidated houses on Southwest Marine Drive that he had been cleaning out earlier that day, his last conversation with Sophie's mother echoing in his mind.

"Do you think me a bad mother?" she had asked, shaking her head. "I keep telling myself that here, in this apartment, Sophie will be safer than in the mountains. And you know what? I swore to myself I wouldn't do what my own mother had done to me. But who will take care of them through the storm? They raised me when I had no one else."

"Then just make sure that you come back safe," said Paul. "And please don't think of yourself that way. Mine never left my side, but she was never really there either."

"I hope she could forgive me," whispered Sophie's mother. "I hope, one day, she would understand."

As he saved objects left behind that Sophie could use, Paul wondered if the tight knot of shame in his chest would ease. He was glad that on that night, Sophie's mother had not opened their door, no matter how much he had pleaded with them to do so.

But Sophie had written him a note, had asked for him to return, had bound herself to him with her forgiveness. And clutching the bouquet of peonies, Paul remembered the sound of rain falling, and no longer felt cold.

---

**Jiameng Xu**

University of British Columbia, Canada

*Contact:*  
[jxutree@gmail.com](mailto:jxutree@gmail.com)

---

# SOIGNER LES NOUVEAUX CENTAURE

*By Sandra Friedrich*

Courons mon chien et ressentons un peu. Non pas des émotions triviales, non pas l'essence cachée de nos vies. Prenons le temps de cette foulée et soyons avec nos corps dans un mouvement de vie. En s'affranchissant du connu. Avec attention. Comment mettre le corps en harmonie avec la pensée? En bougeant avec son chien. Le Centaure des temps modernes c'est le coureur attelé à son chien. Courir en duo est un acte de subversion: c'est entrer en Nature, c'est aller là où peu vont, sans savoir où l'on va, c'est une longue plongée dans son intériorité - abîme? - c'est se rassembler. Le recours à la forêt, à la montagne, aux sentiers est une échappée belle pour reprendre son souffle, affûter ses sens, renouveler sa curiosité, connaître des moments d'exception bien éloignés des routines du quotidien.

Et recouvrer la santé.

En respectant son corps, l'humain se respecte en tant qu'être. En courant avec son chien, il rajoute cette paix d'être uni. Ça ne peut se construire durablement et profondément sans la joie d'être incarné, sans l'acceptation

de son propre corps, de ce qu'il perçoit, ressent, exprime. Qu'apporte de plus le canidé? Son mouvement est un surgissement : une surprise, une découverte. Il est aisé pour lui de se mouvoir. Le respect du corps est la source du respect de l'être. Le canicross sert cela. Et l'OMS l'a bien compris.

En 2053 dans sa stratégie mondiale sur l'alimentation, l'activité physique et la santé, l'organisation mondiale préconise le canicross pour réduire les facteurs de risque des maladies chroniques qui résultent d'une mauvaise alimentation et de l'absence d'activité physique des humains. Il faut des mesures sanitaires durables et interspécifiques. Le canicross c'est unir en un effort commun - mais un effort différent - deux espèces. Le canicross c'est un sport. C'est courir avec son chien et c'est, désormais, hautement prescrit par les différentes instances de santé publique dans le monde.

Pratiquer ce sport c'est être en présence de deux co-entraîneurs : le chien aide l'humain à avancer en tirant dans son harnais. Incidemment, il en est canalisé. L'humain fait de



l'exercice et offre au chien la capacité d'apprendre par lui-même. En étant devant l'humain, le chien trotte vers l'avenir une foulée à la fois! Le canicross c'est la quintessence de la relation unissant deux espèces. Car, il arrive un moment où les deux souffles sont en écho, où la foulée ne fait plus qu'une, où l'énergie porte les deux athlètes. Ça arrive, plus souvent qu'autrement quand la beauté d'un sentier unit l'humain-animal-végétal. Ce sont des moments de communion.

Quand un des deux dans le lien est blessé, la course ou l'entraînement est reporté. Et c'est à ce moment qu'intervient le physiothérapeute du futur. Dans son cursus universitaire, iel aura suivi des séminaires sur la santé canine. Bien entendu!

Comment soigner ces deux athlètes, le chien et l'humain? À moins d'ouvrir un cabinet en association avec un médecin vétérinaire....



En 2053, vivre aux côtés d'un animal de compagnie est reconnu comme un déterminant social de la

santé. Désormais, les études sur la santé humaine tiennent compte de la présence ou de l'absence d'un animal de compagnie au domicile. La nature de la relation avec l'animal est une variable significative dans les études. D'ailleurs, il est une plaisanterie que les professionnels de la santé aiment à se raconter et qui débute toujours à peu près comme ça : « Tu te souviens quand on lisait des études sur la santé humaine de 2022, jamais les chiens n'étaient considérés....».

# CARING FOR THE NEW CENTAURS

*By Sandra Friedrich*

Let's run, my dog, and feel a little. Not trivial emotions, nor the hidden essence of our lives. Let's take the time for this stroll and be with our bodies in a movement of life. Freeing ourselves from the known. Paying attention. How to bring the body into harmony with the mind? By moving with your dog. The modern-day Centaur is a runner harnessed to his or her dog. To run in duet is an act of subversion: it is to enter Nature, it is to go where few go, without knowing where one is headed, it is a long dive into one's interior - abyss? - it is to unify. Recourse to the forest, the mountains, the paths is a beautiful escape to catch one's breath, to sharpen one's senses, to renew one's curiosity, to experience exceptional moments far from the routine of daily life.

And to recover your health.

By respecting the body, humans respect themselves as beings. By running with one's dog, a human gains peace through union. This union cannot be solid and deep without both rejoicing in their carnal selves, without acceptance of the body, of perception, feelings, expres-

sions. What else does the canine bring? Its movements emerge: a surprise, a discovery. It is easy for a dog to move. Respect of the body is a source of self-respect. Canicross serves this purpose. And the WHO has understood this.

In 2053, in its global strategy on diet, physical activity and health, the World Health Organization recommended Canicross to reduce risk factors for chronic diseases that result from poor nutrition and lack of physical activity. Sustainable, cross-species health measures are needed. Canicross is about uniting in a common effort - but a different effort - two species. Canicross is a sport. It is running with your dog and it is now highly prescribed by public health authorities around the world.

To practice this sport is to be in the presence of two co-trainers: the dog helps the human to move forward by pulling on its harness. Incidentally, this is channeled. The human is exercising and giving the dog the ability to learn on its own. By being in front of the human, the dog is trotting towards the future one stride at a time! Canicross is the quint-

essential relationship between two species. For there comes a time when the two breaths are in echo, when the stride is but one, when the energy carries both athletes. It happens, more often than not, when the beauty of a trail unites the human-animal-plant worlds. These are moments of communion.

When one of the two in the bond is injured, jogging or training is postponed. And that's when the physiotherapist of the future comes in. In his or her university studies, he or she will have taken seminars on canine health. Of course! How do you treat these

two athletes, the dog and the human? Unless you collaborate with a veterinarian....

In 2053, living with a pet is recognized as a social determinant of health. Human health studies now take into account the presence or absence of a pet in the home. The nature of pet-human relationships is a significant variable in studies. In fact, there is a joke that health professionals like to tell each other that always begins something like this: "Remember when we read human health studies in 2022, dogs were never considered....".




---

## Sandra Friedrich

Université du Québec à Montréal, Canada

*Contact:*  
[friedrich.sandra@courrier.uqam.ca](mailto:friedrich.sandra@courrier.uqam.ca)

---

# UTOPIOITA GENITAALISILTA RAJAPINNOILTA: ENTÄ JOS LANTIONPOHJAN TERVEYS OTETTAISIIN TOSISSAAN?

*By Annastiina Rajala-Vaittinen*

Annastiina katsoo puhujan pöntön takaa monituhatpäistä yleisöä Nokia Areenalla Tampereella. Tutkimuskeskus KusPaskan 30-vuotisjuhlaseminaari oli juuri alkamassa. Annastiina oli jo eläköitynyt keskuksen johtajan paikalta. Hän oli ollut keskusta perustettaessa kantavia voimia yhdessä Jounin kanssa, joka oli pyytänyt Annastiinaa pitämään menneisyyttä luotaavan puheen juhlan kunniaksi.

Annastiinaa katsoo yleisössä näkyviä tuttuja kasvoja. Osa juhlan kunniavieraita ja tuttuja vuosien takaa, mutta joukossa on myös monia nuoria tutkijoita ja ammattilaisia, joiden kasvoja hän ei tunnista. Ala on kasvanut niin valtavasti, että on mahdotonta tuntea kaikki.

Ennen vanhaan lantionpohjan, suoliston ja virtsarakon toimintahäiriöistä kiinnostunut porukka oli kovin pieni, ja aihe epäseksikäs. Nyt tilanne oli kaikkea muuta. Nykyään ei oikeastaan voinut enää toimia missään terveydenhuollon ammatissa, tai tutkia terveydenhuoltoa, jos ei ymmärtänyt perusteita lantion alueen toiminnasta ja toimintahäiriöistä.

Annastiina hymyilee, liikuttuukin vähän, muistellessaan sitä pölyistä toimistonnurkkaa Tampereella, johon tutkimuskeskus KusPaska aikanaan laitettiin pystyyn, pienten säätiörahoitusten, satunnaisten hankerahoitusten sekä riippumattomuuden sallivien yritysrahoitusten turvin. Sankariyksilöitä, ummehtunutta bisnespöhinää ja kaupallisia innovaatioita ajava yliopisto oli tuolloin muuttunut mahdolliseksi paikaksi tehdä aidosti maailmaa mullistavaa tutkimusta. Annastiina ja Jouni olivat ottaneet hypyn tuntemattomaan, perustamalla Tutkimuskeskus KusPaskan leikkisällä motolla "Pelvic potential unlimited", tai suomeksi "Lantio ratkaisee". Ja tässä sitä oltiin, kolmekymmentä vuotta myöhemmin. Muutosta oli saatu aikaiseksi.

Annastiinan silmät tavoittavat eturivistä nyt jo harmaahapsisen Jounin, joka nyökkää ja vinkkaa silmää. Annastiinan mieleen tulee se yksi iänikuisen vanha sisäpiirivitsi, johon liittyi sonneja. Hän työntää kikatuksen tunteen sivuun, nykäisee mikrofonia lähemmäs suutaan ja rykäisee salin hiljentämiseksi. On



aika aloittaa juhlat, ja muisteleminen. Hän tulisi varmasti jaarittelemaan, mutta väliäkö tuolla. Tässä oli aihe, josta ei koskaan jaariteltaisi maailmassa tarpeeksi!

## ARVOISA JUHLAVÄKI,

Joku joskus sanoi, että hyvä puhe alkaa anekdootilla. Aion kertoa useita. Kun minä valmistuin fysioterapeutiksi neljäkymmentäviisi vuotta sitten, lantionpohjan osuus koulutusohjelmastamme oli yhden luennon mittainen. Työelämässä sama juttu: ei puhetta lantionpohjasta, ei siihen liittyvistä elimistä. Vaginasta, anuksesta, rakosta tai suolistosta – saati näihin liittyvistä, tai näistä vuotavista ruumiin eritteistä.

Joidenkin mielestä oli jopa fysioterapian ammattikunnan arvoa alentavaa osallistua iäkkäämpien asiakkaiden WC-käynteihin hoivakodeissa tai vuodeosastoilla. Pyllyn pyyhkiminen tai genitaalialueiden koskeminen oli kauhistus! WC ei ollut kuntoutuksen arvoinen paikka. Se oli paikka hiljaiselle, mutta välttämättömälle päivittäiselle tarpeiden tekemiselle, naistapaiselle avustamiselle. Suljettujen ovien takana, poissa silmistä, poissa mielestä – aina silti välttämättömän materiaalisena ja aistillisena läsnä ihmisten terveyden seurannassa ja ylläpidossa.

Työskentelin valmistumiseni jälkeen terveyskeskuksessa. Kyllä, hyvinvointikeskuksia kutsuttiin tuolloin terveyskeskuksiksi, voitteko kuvitella! Niihin ei tultu voimaan hyvin, vaan ihan rehellisesti terveysongelmien kanssa. Jotain hyvää siis oli siellä menneisydessäkin.

Työn arjessa minulle tuli vastaan monenlaisia asiakkaita, joilla oli pidätyskyvyn kanssa ongelmia, erisyistä, eikä ainoastaan ikääntymisestä johtuen. Luulen, että ongelmia oli jopa enemmän kuin havaitsimme, sillä niihin aikoihin terveydenhuollon ammattilaisista suurin osa ei oma-aloitteisesti ja rutiinisti ottanut puheeksi rakon ja suolen toimintaan liittyviä asioita. Toisin kuin nykyään. Ajatelkaa! Sehän on tänä päivänä kaikkien protokollien mukaan välttämätön asia kysyä. Tuolloin ei puhuttu ei pukahdettu, oikeastaan juuri muualla kuin Vauva-lehden keskustelupalstalla ja erikoisalojen konferensseissa. Puuttui avoin keskustelukulttuuri. Koko lantionpohja oli hävetty ja vaiettu asia. Urheilijatkin puhuivat ennemmin “coren” alueen vahvistamisesta, tai “syvistä vatsalihaksista”. Samoin virtsaaminen ja ulostaminen olivat aiheita, joista ei saanut puhua kuin vessassa. Ihan totta! Sanat “uloste” tai “aikuisvaippa” tutkimussuunnitelmien otsikoissa koettiin siinä määrin provosoivaksi, että niillä pääsi lehteen! Aivan kuin asia ei koskisi meitä kaikkia.

Kyllä me siellä terveyskeskuksessa pyrimme asiakkaillemme antamaan lantionpohjan kuntoutusohjeita ja järjestimme jumpparyhmiä, mutta esimerkiksi biopalautelaitteita diagnoosien ja kuntoutuksen tueksi ei ollut saatavilla. Tällaisten merkityksestä diagnosoinnissa ja kuntoutuksessa opin itsekin oikeastaan vasta kun hakeuduin lantionpohjanfysioterapiaan keskittävään täydennyskoulutukseen – omalla rahalla toki, sillä julkisen sektorin työnantaja ei nähnyt tällaisella mitään arvoa. “Fysio-

terapeutti kuin fysioterapeutti, samat jumpparin hommat osaat varmasti hoitaa ilman erikoistumisiakin,” oli röyhkein vastaus pyyntöni.

Menin kuitenkin koulutukseen, ja pian sen jälkeen saimme hyvinvointikeskukseemme biopalaute-laitteet. Tämä oli valtakunnallisesti edistyksellistä! Tuolloinhan julkisen sektorin lantionpohjan fysioterapeutit toimivat kaikki käytännössä erikoissairaanhoidon puolella. Eikä sinne saanut kukaan lähetettä, muuten kuin ihan tosi graavien ongelmien kanssa. Sellaiset pienemmät lirahtelut ja plörähtelyt käsitettiin vaivoiksi, jotka kuuluvat joidenkin ihmisten – kuten vanhusten tai synnyttäneiden naisten – arkeen ja ominaisuuksiin. Ei niitä hoidettu tai kuntoutettu.

Vaan meilläpä alettiin hoitamaan ja kuntouttamaan! Tämä biopalaute-laite minkä saimme hyvinvointikeskukseemme, olikohan se nyt sitten vuonna 2025. Siihenhän ei suinkaan investoitu siksi, että me olimme fyssarikollegani kanssa vaatineet laitetta useita vuosia, vaan siksi, että eräs erikoislääkäri sanoi, että tällainen kyllä tarvittaisiin. Kiitokset vaan Kaleville sinne jonnekin pilven reunalle, että käytti asemaansa viedessään viestiämme eteenpäin.

Olihan se nyt selvää, että tulisi halvemmaksi diagnosoida ja kuntouttaa ihmisten lievempiä virtsan- ja ulosteenkarkailuvaivoja kuin antaa olla, määrätä vaippalähte ja odotella leikkaustarvetta vanhemmalla iällä. Olimme toki käyttäneet samaa argumenttia kuin tämä erikoislääkäri jo useita vuosia, tuloksetta, mutta siihen

aikaan ei lantionpohjan fyssareiden tietoa paljoa arvostettu. Tarvittiin lääkäri, miespuolinen ja erikoissellinen, ottamaan asia puheeksi hallinnossa. Tämän jälkeen laite saatiin muutamassa kuu-kaudessa.

Sen jälkeen meillä Hetan – sen yksikön toisen fyssarin, moi Heta! Hetan pitäisi olla siellä jossain yleisössä – niin Hetan kanssa meillä piisasikin kiirettä. Olimme ainoat, jotka laitteesta saivat hyötyjä irti. Sitten tapahtui toinen ihme. En nyt muista, oliko tällä edistyksellisellä urogynekologi Kalevilla tässäkin sormensa pelissä, mutta jonkun hankerahan turvin alueen kaikkiin hyvinvointikeskuksiin hankittiin biopalaute-laitteet. Ne sijoitettiin neuvoloihin, joihin sitten kahdesti viikossa ostettiin yksityisyrittäjinä toimivilta lantionpohjan fysioterapeuteilta palvelua kaikille neuvolan asiakkaille, tavoitteena raskauden ja synnytyksen aiheuttaman inkontinenssin ennaltaehkäisy ja hoito.

Erään yliopiston tutkijat tekivät hankkeen seurantaan. Tutkimuksessa kävi ilmi, että asiakkaat raportoivat huomattavasti vähemmän lantionalueen toimintahäiriöitä kuin verrokkiryhmänsä eräällä toisella hyvinvointialueella, jolla ei ohjattua lantionpohjan fysioterapiaa synnyttäjille tarjottu. He myös kokivat voivansa ottaa sekä virtsan- että ulosteenkarkailuun liittyvät vaivat helpommin puheeksi. Yllättävää kyllä, terveydenhoitajat kyseisissä neuvoloissa raportoivat samaa, vaikka he eivät olleet edes mukana lantionpohjaa koskevassa hoitotyössä ja hankkeessa sinänsä. Pelkkä lantionpohjan terveyteen keskittyvän

viikoittaisen klinikan sijainti samassa yksikössä aiheutti muutoksen terveydenhoitajien toimintatavoissa!

Tämän pilottihankkeen positiivisia vaikutuksia julkiseen talouteen voidaan nähdä vielä tänäkin päivänä, reilun kolmenkymmenen vuoden jälkeen. Kyseisen hyvinvointialueen inkontinenssisuojakustannukset ovat noin kolmanneksen pienemmät kuin muilla hyvinvointialueilla. Samoin ympärivuorokautisen hoidon tarve iäkkäiden keskuudessa alkaa jonkin verran myöhemmällä iällä kuin muualla Suomessa, ja inkontinenssisuojoihin liittyvien painehaavojen hoitokustannuksiin kuluu kolmannes vähemmän rahaa. Yhteensä puhutaan kymmenien miljoonien eurojen säästöistä hyvinvointialueen budjetissa. Joitakin esimerkkejä mainitakseni. Hyvinvointialueemme on Suomen kuivin – ja ehkä myös onnellisin. Kansantaloudellisestihan tämä on ollut todella merkittävä asia. Vuonna 2006 arvioitiin, että inkontinenssin kustannusten olisivat nousseet laskentatavasta riippuen 1,6–4,3 miljardiin euroon jo vuonna 2040. Voidaan todeta, että vuosikymmenet kovaa työtä kansalaisten lantionpohjien eteen on tuottanut tulosta. Kaikkia kansantalouden vuotoja emme toki koskaan pysty tilkitsemään, mutta edes tuon kustannusarvion alarajaa ei ohitettu vuonna 2040, eikä vielä.

Samoja terveystaloudellisia trendejä on toki nyt jo nähtävissä myös muualla Suomessa, mutta viiveellä. Valtakunnallisesti lantionpohjanfysioterapian valtavirt(s)aistaminen osaksi peruspalveluja ja neuvolakäytäntöjä tapahtui vasta kymmenen vuotta myöhemmin,

Genitaalilakina tunnetun laki-muutoksen jälkeen.

Kuten kaikki tiedämme, vuonna 2035 tämä merkittävä sosiaali ja terveysjärjestelmämme kestävyyttä parantava laki turvasi kansalaisille tasavertaiset gynekologiset, urologiset ja lantion alueen terveyttä koskevat palvelut valtakunnallisesti, sukupuoleen ja ikään katsomatta. Laki paransi huomattavasti myös syrjäseutujen asemaa.

Toki tätäkään lakia

ei saatu ilman

vuosia kestä-

nyttä kiivasta

ja poliittisesti

polarisoitua

keskustelua,

jossa eräälle

osapuolelle

kaikki genita-

alialueisiin tai

eritteisiin liittyvä

oli jostain käsittämät-

tömästä syystä

”vihervasem-

mistolaista mädätystä”. Ilmeisesti

vain ”vihervasemmisto-laisilla” oli

rakko, suolisto, lantio ja genitaalit, ja

näillä jotain tarpeita.

Ehkä yhtenä syynä antipatiaan oli se, että Genitaalilaki oli niitä ensimmäisiä sotelakeja, joissa lain laadinnan joka käänteessä pohdittiin hyvin tietoisesti sosiaalista ja ekologista kestävyyttä. Ei menty niin sanotusti raha edellä, mikä niin monta kertaa johti siihen, että mentiin kyllä ”edellä”, mutta lähinnä perse edellä puuhun. No, onneksi nämäkin polarisaation ”jarrujäljet” ovat nyt muistoissa vain, kun alettiin ymmärtämään, että kaikilla on lantionpohja, kaikilta erittyy virtsaa ja ulostetta – niin filosofeilta,



kuninkailta kuin hienoilta leideltäkin, Michel de Montaigne liberaalisti lainaten.

Lain ansiosta tapahtui monia asioita. Ei vähimpänä se, että nykyään meillä on kaikissa hyvinvointikeskuksissa töissä lantionpohjan fysioterapeutteja tai muita terveydenhuollon ammattilaisia, joilla on koulutus lantionpohjan terveyden ylläpitoon. Heille saa varattua ajan matalalla kynnyksellä ilman lähetettä, vaikka olisi vaan pieniä lirahteluongelmia – niitä sellaisia, mihin ennen vanhaan hihitelleen suositeltiin vaan ottamaan ”tenaleidit” käyttöön.

Genitaalilain voimaantumisen jälkeen lantionpohjasta, virtsaamisesta ja ulostamisesta puhuminen on vuosien myötä juurrutettu osaksi terveys-tiedon ja liikunnan opetus-suunnitelmia, ja myös varhais-kasvatuksen työntekijöitä ja urheiluseurojen juniorivalmentajia on koulutettu asiasta paljon. Nykyajan nuoret aikuiset ovat siis tunteneet lantionpohjaan liittyvät asiat jo lapsesta saakka.

Tabu alkaa murtua, hoitoon hakeudutaan hyvissä ajoin, ja vaivoja myös on vähemmän. Väitän myös, että KusPaskan ammattiurheiluvallennusta koskevalla tutkimuksella on jonkunlainen rooli siinä, että Suomi voitti jalkapallon maailmanmestaruudet sekä miesten, naisten että sekajoukkueiden sarjoissa, ja että yleisurheilun arvokisamitaleita odotetaan nykyään juoksu- ja hyppylajeista rutiini-suorituksena. Kun vuonna 2022 lantionpohjaa ei koskaan mainittu voimaharjoittelussa sanallakaan –

voitteko kuvitella – nykyään kaikki tietävät sen olevan merkittävä voimantuotannon perusta.

Nykyään puhutaan myös ikääntyvien ja vanhusten kohdalla kontinenssihoidosta inkontinenssihoidon sijaan. Tämä johtuu siitä, että p-idätyskykyyn kohdistuu vanhusneuvoloissa ennaltaehkäiseviä ja ylläpitäviä palveluita, eikä se ole vain asia, jonka menettämistä odotetaan vanhuuden vääjäämättömänä rapjyykkinä.

Myös aikuisvaippajäte on vähentynyt huomattavasti ja suurin osa käytössä olevista tuotteista on joko kierrätettäviä, biohajoavia tai uudelleen käytettäviä. Synteettinen biologia on valjastanut bakteeriviljelmät punomaan vaippojen muovia korvaavat raaka-aineet, eikä öljyä tarvita valmistukseen. Metsäteollisuuden sivuvirtoja hyödynnetään myös raaka-aineissa. Saimme Norjan kiinni aikuisvaippojen peruseluvun jo ensimmäisinä vuosina Genitaalilain voimaan tulon jälkeen. Samoin aikuisvaippajätteen määrä yhdyskuntajätteestä on pienentynyt 0,01 prosenttiin vuoden 2021 keskivastasta, mikä oli 7,9 %. Yksi syy varmasti on, että hoitopolut toimivat ja hoitoon ohjataan oikeaan aikaan. Eikä avun saaminen katso lompakon paksuutta. Palvelusetelillä on saanut kuka tahansa apua tarvitseva käyttää lantionpohjaan erikoistuneen yksityisen fysioterapeutin palveluja. Myös julkisen sektorin perusterveydenhuolto sekä työterveys työllistää nykyään ennen näkemättömän määrän lantionpohjan terveyden asiantuntijoita. Heidän joukossaan on paitsi fysioterapeutteja, myös



uroterapeutteja, kättilöitä, terveydenhoitajia ja sairaanhoitajia, joille on julkisista varoista kustannettu täydennyskoulutus. Heille voi matalalla kynnyksellä varata ajan monessa paikkaa myös ilman lähetettä. Toisaalta nykyään myös muu terveydenhuoltohenkilökunta osaa suositella palvelua, sillä inkontinenssin eri tyypit, hoito ja ennaltaehkäisy on osa kaikkien terveydenhuollon ammattilaisten peruskoulutusta. Voitteko kuvitella, että näin ei ollut vielä 2020-luvulla – vaikka jo tuolloin inkontinenssin tiedettiin olevan heinänuhaa yleisempi vaiva! Vielä Tutkimuskeskus KusPaskan perustamisen aikoihin valtaosa lantionpohjaan perehtyneistä ammattilaisista työskenteli yksityisinä elinkeinonharjoittajina, jonne ei lähetteitä herunut, saati palveluseteleitä.

Eihän tämä ennaltaehkäisy ole mitään rakettitiedettä. Tämän älyämiseen meni ihan liian kauan, jos ajatellaan sitä kehitystä ja niitä vaikutuksia, mitä olemme viimeisten vuosikymmenten aikana nähneet, ja mitä olisimme voineet tehdä jo hyvin hyvin kauan sitten. Ei se aina vaatinut suuria investointeja ja budjettien mylläyksiä. Hyvä esimerkki pienen investoinnin muutoksesta on lääkäriopiskelijoiden, fysioterapeuttien, kättilöiden, sairaanhoitajien ja terveydenhoitajien tiivistynyt yhteistyö jo opiskeluaikana. Kas kummaa: se, että eri alojen asiantuntijat tietävät, mitä toisten alojen asiantuntijat tekevät työkseen, on sujuvoittanut muun muassa kuntoutukseen tai erikoissairaanhoitoon ohjautumista. Näin on säästynyt sekä rahaa että luonnonvaroja.

Kun lääkärit ymmärtävät ja ovat tietoisia lantionpohjan ohjatun harjoittelun hyödyistä ja ennen kaikkea ennaltaehkäisystä ja varhaisesta puuttumisesta, on moni vaivainen saanut apua ajoissa. Ja kyllähän se vaan pitkään on ollut niin, ja osin edelleenkin, että lääkärikoulutuksen saaneita ihmisiä kuunnellaan ja heitä kohdellaan asiantuntijoina, kun muut terveydenhuollon ammattilaiset nähdään vain “tekevinä käsinä”, avustajina ja duunareina. Tämäkin onneksi on pikkuhiljaa muuttunut. Ammattikunnat arvostavat toistensa asiantuntemusta ja osaamista, kuuntelevat toisiaan, ja ymmärtävät toinen toistensa työnkuvan. Tämä on ollut merkittävä edellytys hoitopolkujen sujuvoittamiseksi, kuten osoitimme KusPaskan ensimmäisissä tutkimuksissa – vuonna miekka ja kivi.

Kolmenkymmenen vuoden ajan olemme Tutkimuskeskus KusPaskassa pyrkineet edistämään monitieteisen tutkimuksen keinoin lantionpohjan terveyden asiaa. On ihanaa nähdä meitä täällä juhlimassa näin paljon. Kiitos tästä menestyksekkäästä taipaleesta kuuluu paitsi kaikille läsnäolijoille, myös kaikille yhteistyökumppaneillemme, rahoittajillemme, ja ennen kaikkea lukuisiin tutkimushankkeisiin osallistuneille ihmisille ja yhteisöille.

Kirjoittaessani tätä puhetta ajattelin pitkään ja hartaasti, että voinko tänä vuonna puhua asioista niiden omalla nimellä. Suoraan ja kiertelemättä. Päätin, että turhan pönötyksen aika on ohi. Tässä siis teille suora, vilpitön kiitokseni: ilman teidän jakamaanne tietoa ja ymmärrystä, ei meillä olisi

tätä kaikkea tietoa ja ymmärrystä, joka on tehnyt maastamme ja maailmastamme vähemmän kuisen paikan elää. Juhlikaamme, ja nosta-  
kaamme malja Tutkimuskeskus KusPaskalle: tulevaisuudelle!

tarvitse häpeillä. Annastiina tunsi menneiden vuosikymmenten ilojen, onnistumisien, surujen ja turhautumisten vyöryvän liikutuksena rintaan. Ei. Ei tämä ole yhtään kuisempi paikka elää.

Annastiina nosti lasin kohti yleisöä ja otti siemauksen. Yleisön alkaessa taputtaa, hän ehti katua heittoansa vähemmän kuisesta paikasta elää pienen hetken, kunnes hänen katseensa tavoitti naurun ja liikutuksen kostuttamat tutut ja tuntemattomat silmät yleisöstä. Hän tunsi sunnatonta iloa ja ylpeyttä siitä, että ehkä Tutkimuskeskus KusPaskalla on ollut sormensa pelissä, edes hiukan, sellaisen maailman luomisessa, missä ei

---

**Annastiina Rajala-Vaittinen** on Tiina Vaittisen (Yliopistotutkija, Tampereen yliopisto) ja Anna Ilona Rajalan (Suomen Akatemian tutkijatohtori, Tampereen yliopisto) yhteiskirjoitusnimi. Annastiina on enemmän kuin Anna ja Tiina – joskin molemmat seisovat tekstin kuvaaman utopian takana myös yksilöinä. Tekstin kirjoittamisessa on hyödynnetty suomalaisten lantionpohjan fysioterapeuttien kevättalvella 2021 kirjoittamia utopioita, sekä muita Vaippahankkeen ([vaippahanke.fi](http://vaippahanke.fi)) tutkimusaineistoja. Taloudellisesta tuesta Annastiina kiittää Koneen Säätiötä (hanke nro 201802636), sekä seuraavia Suomen Akatemian rahoittamia hankkeita: Hoivan kestävä tulevaisuus: Aikuisille suunnattujen vaippojen globaali poliittinen talous (Vaippahanke) (hankenro 321972), Assembling Postcapitalist International Political Economy (hanke nro 325976), ja Julkitedyn ulosteen politiikka kaupunkikuvassa, taiteessa ja bioetiikassa (hanke nro 350247).

# UTOPIAS FROM THE GENITAL LIMITS: WHAT IF PELVIC FLOOR HEALTH WAS TAKEN SERIOUSLY?

*By Annastiina Rajala-Vahtinen*

Annastiina looks from behind the speaker's booth at the audience of several thousand people at the Nokia Arena in Tampere. Research Centre PisSHit's 30th anniversary seminar is just about to begin. Annastiina has already retired as director of the centre. She had been the driving force when the centre was founded, together with Jouni, who has asked Annastiina to give a speech in honour of the Research Centre's past.

Familiar faces in the audience watch Annastiina, some of them guests of honour and acquaintances from years ago, but there are also many young researchers and professionals whose faces she does not recognise. In the olden days, the group interested in dysfunctions of the pelvic floor, bowel, and bladder was very small, and the topic unsexy. Now you couldn't work in any healthcare profession, or do research in healthcare, if you didn't understand the basics of how the pelvic area works – or doesn't work.

Annastiina smiles and feels moved. She suddenly remembers that dusty

office space in Tampere, where PisSHit was first established all those years ago, with the help of small grants from foundations, occasional project grants, and impartial corporate funding. At that time, the university was driven by business hype. Researchers were supposed to be heroic individual superstars innovating for business profit, and commodifiable research results were considered primary, rather than appreciating the values of slow science, rarely directly commodifiable. The university had turned into an impossible place to work for those scholars who wanted to change the world by focusing on the unspoken and stigmatised margins of society.

Tired of the suffocating atmosphere within the university, Annastiina and Jouni had taken a leap to the unknown, establishing Research Centre PisSHit, with the playful motto "Pelvic potential unlimited." And here we are, thirty years later: society had been changed indeed.

Annastiina's eyes reach the now grey-haired Jouni sitting in the front row, nodding, and winking at Annastiina. That age-old inside joke of theirs, the one that involved bulls, pops into her mind. Annastiina almost struggles to push the giggles aside, and then clears her throat to silence the room. She would definitely ramble on for too long, but it doesn't matter. The topic could never be talked about enough!

Dear Celebrants,

A good speech usually begins with an anecdote. I'm going to tell several. When I graduated as a physiotherapist forty-five years ago, a single lecture was reserved for the theme of the pelvic floor. The same silence continued in working life: not a hiss about the pelvic floor, nor about the vagina, anus, bladder, or bowel – let alone the leakages and secretions that relate to these organs.

Some even felt that it was demeaning for a physiotherapist to participate in toileting activities in nursing homes or wards, and wiping another person's butt or touching the genital areas was seen as disgraceful! The toilet was not considered a place where rehabilitation took place. It was a place for silent but necessary daily bowel and bladder business, and feminised care labour. Behind closed doors, out of sight, out of mind – yet always present as a necessary material-sensory aspect of caring for people.

After I graduated, I worked at a healthcare centre. Yes, wellbeing centres were called healthcare centres

back then, can you imagine! You wouldn't go to these places to "be well," but, rather, with health problems. So, there were some good practices and discourses in the past, as well.

I came across many kinds of people in my work who had problems with continence, for various reasons, and not only due to aging. The problems were more common than we often realised, because in those days most healthcare professionals would not routinely address these issues. Unlike today. These days, of course, it is a necessity to ask all patients about the function of their bladder and bowel. Previously, there was a lack of openness about these issues. The pelvic area was considered an embarrassing thing. Even athletes would talk about strengthening the "core" rather than the pelvic floor. Urinating and defecating were topics that could only be discussed in the toilet. Honestly! The words "excrement" or "adult incontinence pad" in the titles of the research plans were considered so provocative that they made headlines! As if these things didn't concern us all.

We did our best, of course, to offer our clients instructions for pelvic floor rehabilitation. We also organised exercise groups. However, we did not have all the necessary technology available for diagnostics and rehabilitation, such as biofeedback devices. I only learned about the importance of such devices when doing my additional diploma training in pelvic floor physiotherapy. I paid for the training out of pocket, of course, because the public



sector employer saw no value in such a thing. "A physiotherapist is a physiotherapist. All of you do the same things even without specialisation," was the rudest answer to my request.

I took the training, however, and soon after we got biofeedback devices. This was truly progressive, compared to other regions in Finland. At that time, all pelvic floor physiotherapists employed in the public sector were working in specialised care, such as university hospitals, and the rest were employed in the private sector or worked as entrepreneurs. And you would not get a referral to these specialists unless you had some serious dysfunctions, injuries, or pain. Minor leakages, sloses, and toots were understood as ailments belonging to everyday life and the identity of some people – such as the elderly, or people who had given birth. Minor dysfunctions in the pelvic area were simply not properly treated or rehabilitated.

Once we got the biofeedback device in 2025, we truly started to treat and rehabilitate! My physiotherapist colleague and I had demanded it for several years, in vain, but now a medical specialist said that such a thing would be needed – and we got it! So, thank you Kalevi, somewhere on the edge of the cloud, for using your position to take our message forward.

After all, it was clear that diagnosing and rehabilitating people's milder urinary and faecal incontinence would be cheaper than prescribing a

pad referral, while waiting for the need for surgery at an older age. Of course, we had used the same argument as this medical doctor for several years already, without success, but the knowledge of pelvic floor physiotherapists was not valued much. A medical doctor, a male and a specialised one, was needed to raise the issue with the administration. Following his intervention, the device was received within a few months.

After that, Heta and I – hi Heta, she should be in the audience somewhere – we were quite busy. We were the only ones who had the skills to use the device. Then another miracle happened. I don't remember if this progressive urogynaecologist Kalevi was involved here as well, but thanks to some project money,

biofeedback dev-

ices were acquired for all the wellbeing centres in the area. They

were placed in parental health clinics, where a pelvic floor physiotherapist would

come in twice a week. For the first time in

Finland, their skills were utilised for the prevention and treatment of incontinence caused by pregnancy and childbirth for an entire generation of mothers, not just those who had money to buy the service out of pocket.

Researchers monitored the impact of this pilot project. The study revealed





that people reported significantly fewer pelvic floor dysfunctions than the control group in another region where guided pelvic floor physiotherapy was not offered. They also felt that they could more easily talk about problems related to both urinary and faecal incontinence during their health appointments in general. Surprisingly, the public health nurses in those parental health clinics reported the same thing, even though they were not involved in the pelvic floor care work and the project per se. The mere existence of a weekly clinic focusing on pelvic floor health in the same unit led to a change in nurses' work practices!

The positive effects on economic, social and ecological sustainability of this pilot project can still be seen today. While our primary interest was in holistically sustainable continence care, rather than savings in the costs of health care, the promise of economic savings was a central incentive for the funders to support the pilot. And we delivered! In the administrative region in question, the costs of incontinence pads for the public economy are about a third lower compared to the other regions that did not take part in the pilot. Likewise, the need for round-the-clock residential care for the elderly in this region seems to come at a somewhat later age than elsewhere in Finland. Similarly, a third less money is spent on the treatment costs for pressure ulcers. In total, we are talking about savings of tens of millions of Euros. Our well-being region is 'the driest' in Finland – and perhaps also the happiest. In

terms of the national economy, it was estimated in 2006 that the costs of incontinence would have risen to 1.6–4.3 billion Euros by 2040. While we will never be able to account for all the leaks in the national economy, even the lower limit of that cost estimate was not exceeded in 2040, and it still hasn't. Decades of hard work for the citizens' pelvic floor has paid off.

Of course, the same health economic trends can already be seen elsewhere in Finland, albeit with a delay. Nationwide, the mainstreaming of pelvic floor physiotherapy as part and parcel of primary health care service and consultation practices only took place ten years later in 2035, after the change in the law known as the Genital Act. This important act aimed at improving the sustainability of our social and health care system and secured equal gynaecological, urological, and pelvic health services for all residents nationwide, regardless of gender and age. Of course, this legislation was not passed without years of intense and politically polarised debate.

Perhaps one of the reasons for the polarisation was the fact that the Genital Act was one of the first health and safety laws in which social and ecological sustainability were consciously considered at every turn. As said, while emphasis on savings was strategically necessary especially in the beginning, we didn't move ahead with the ideology of "money first," so to speak – which so many times previously had led to situations where things moved "ahead" indeed, but mostly "ass-ahead into the tree"

as the Finnish saying goes. Fortunately, the law has gradually helped society understand that everyone has a pelvic floor and excretes urine and excrement – philosophers, kings, and ladies as well, paraphrasing Michel de Montaigne.

Thanks to the Genital Act, things really started to happen. Now we have pelvic floor physiotherapists, or other health professionals with training in pelvic floor health, working in all wellbeing centres. You can get an appointment without referral, even for minor leakage problems – which previously were not treated, but to which people were merely recommended to use "tenaladies."

After the adoption of the Genital Act, knowledge about the pelvic floor, urinating, and defecating was also embedded in schools as part of the health literacy and physical education curricula. Similarly, early childhood education workers and junior coaches of sports clubs were trained and provided knowledge about these issues. As a result, young adults now know about issues related to the pelvic floor from childhood.

The taboo is truly beginning to break, and treatment is sought at early stages when problems emerge, significantly lowering the prevalence of pelvic floor dysfunctions. I would also claim that PisSHit's research in professional sports has played a role in Finland winning the football world championships in both men's, women's, and mixed team series, and that Finnish track and field athletes

qualify better than ever before in international competitions. In 2022, the pelvic floor was never mentioned in strength training for athletes – can you imagine? Today, however, everyone knows that the pelvic floor is an important foundation for generating physical strength.

Today, we also talk about continence care instead of incontinence care for the elderly. This is because continence is the focus of preventive and maintenance services in geriatric health clinics, rather than just something that is expected to be lost as an inexorable threshold of old age.

As for the ecological impact, incontinence pad waste has also decreased considerably, and most of the products are recyclable, biodegradable, or reusable. Synthetic biology deploys bacteria as a work-force for producing the raw materials to replace fossil-based plastics, and the production side streams from the forest industry are efficiently utilised as raw materials. I'm proud to say that we caught up with Norway in reducing pad usage per capita in the first years of the Genital Act, and the national average of pads in household waste has been reduced from 7,9% in 2021 to 0,01%.

One reason for this is that the care pathways function and getting help does not depend on the thickness of the wallet. With a service voucher, anyone can use pelvic floor physiotherapy services. Public sector primary health care and occupational health also employ an unprecedented number of pelvic floor health experts

today. Among them are not only physiotherapists, but also urotherapists, midwives, public health nurses, and registered nurses, for whom there is state-funded continuing education on pelvic health available. Other healthcare personnel also know how to recommend pelvic floor services, because the pelvic floor is part of the basic training of all healthcare professionals. Can you imagine that this was not the case in the 2020s – even though incontinence was already known to be a more common problem than hay fever!

It took far too long to figure out that prevention is not rocket science. It didn't always require big investments either. A good example of this is closer cooperation between medical students, physiotherapists, midwives, nurses, and public health nurses already while they were students. The fact that experts in different fields know what experts in other fields do for work has made referrals to rehabilitation or specialised medical care smoother. Preventing surgeries and pad needs has saved both money and medical resources, thereby saving our precious natural resources and reducing waste produced in the healthcare sector.

Since doctors understand and are aware of the benefits of guided pelvic floor exercises and, above all, prevention and early intervention, many sufferers have received help in time. And yes, it was, and to some extent still is, the case that people with medical training are listened to, while other healthcare professionals are only seen as "hands." Fortunately, this too has gradually changed. Different health professionals

increasingly value each other's expertise and know-how, and understand each other's jobs. This has been a significant prerequisite for streamlining care and treatment pathways, as we showed in PisSHit's first investigations.

For thirty years, Research Centre PisSHit has promoted pelvic floor health through multidisciplinary research. It's great to see so many of us here celebrating today. Thanks for this successful journey goes not only to everyone present here today, but also to all our partners, financiers and, above all, to the people and communities who participated in our numerous research projects.

While writing this speech, I decided that the time for unnecessary snobbishness is over. So, here's my straightforward, sincere thanks to you: without the knowledge and understanding you have shared, we wouldn't have been able to make our country and our world a less shitty place to live in. Let's celebrate and raise a toast to Research Centre PisSHit: to the future!

Annastiina raised her glass towards the audience and took a sip. When the audience started applauding, she regretted saying "shit" for a small moment, until her gaze reached the familiar and unfamiliar teared-up eyes of the audience. She felt deep joy and pride that maybe Research Centre PisSHit has had a role, even a small one, in creating a world where there is no need to be ashamed. Annastiina felt the joys, successes, sorrows, and frustrations of the past decades pouring into her chest. No. This isn't a shitty place to live at all.

---

**Annastiina Rajala-Vaittinen** is the joint nom de plume of Tiina Vaittinen (University Researcher, Tampere University) and Anna Ilona Rajala (Academy of Finland Postdoctoral Research Fellow, Tampere University). Annastiina is more than Anna and Tiina – although both stand behind the utopia described in the text also as individuals. In writing the text, utopias written by Finnish pelvic floor physiotherapists in the spring-winter of 2021, as well as other research materials of the PadProject ([padproject.online](http://padproject.online)) have been used. For financial support, Annastiina thanks the Kone Foundation (project no. 201802636) and the following projects funded by the Academy of Finland: Emergent Un/Sustainabilities of Care: The Global Political Economy of the Adult Incontinence Pad ([PadProject.online](http://PadProject.online)) (project no. 321972), Assembling Postcapitalist International Political Economy (project no. 325976), and Shit made public: the politics of faeces in urban spaces, art, and bioethics (project no. 350247).

---

**Annastiina Rajala-Vaittinen** (corresponding author)  
<https://orcid.org/orcid=0000-0003-0033-4206>

Tampere University, Finland

*Contact:*

[anna.i.rajala@tuni.fi](mailto:anna.i.rajala@tuni.fi)  
[tiina.vaittinen@tuni.fi](mailto:tiina.vaittinen@tuni.fi)

---



# A NOTE FOR FUTURE BODYWORKERS

*By Eriko Fuji*

Dear Readers,

I hope you are well- whoever, wher-ever you are.

This note, or letter is for bodyworkers in the future. I'm a bodyworker myself, an osteopath, to be specific. I like the term bodyworker as that's what we do, be it physiotherapist, chiropractor, massage therapist or any other form of somatic medicine. We work with bodies.

If you're reading this paper, you possibly know that I was assigned to write this piece by the International Association of Bodyworkers. Their aim is to build an archive of 'job descriptions' written in our own words, so that the future generations can understand how the profession has been shaped over the years.

Perhaps, I should start by saying a little more about myself and our time. I was born in 2030, the year by which the world was supposed to reduce the amount of greenhouse gas emissions drastically, yet failed to do so. It was the beginning of the transitional phase now known as the 'Great

Adaptation.' With no exaggeration, every person and industry are required to adapt, and, hopefully, reverse the effect of climate change. Well, you might think that this should have been the case many years prior, and I can't agree more. Regrettably, it took us a long time to come to this stage.

I turned 35 years old this year, and it's somewhat ironic to think that I wouldn't have existed without the climate crisis. My parents are both climate refugees, although they were not recognised as 'refugees' when they arrived in this country as teenagers in the late 2010s. They were forced to leave their home because of 'water' and conflicts associated with it- in my father's case, too little of it (droughts) and in my mother's case, too much of it (hurricanes and floods).

Anyway, let's look at the current state of our profession. MSK (musculoskeletal) problems remain to be a pillar of our work. Lower back pain, neuralgia, osteoarthritis and many other conditions you are probably familiar with.

The main pillar of bodywork today, however, is something of a more enigmatic nature.

Over the last forty years, our inner climate has become increasingly visible and palpable, particularly distress related to planetary destruction. In the past, the pain of the environmental crisis was felt emotionally in the form of ecological grief, climate anxiety and depression. The pain is now felt at the physiological level. For some, it manifests as joint pain, muscle weakness or soreness. In severe cases, it can cause systemic inflammation similar to rheumatoid arthritis and lupus.

It was only in the early 2050s that the condition was given a name: oikosalgia or oikosis, abbreviated as OS. The root word for the two terms is oikos, a Greek word which means house or household, and largely the environment we dwell in. Oikos or eco is also the root word for ecology and economy. As you well know, the suffix -algia and -itis signify pain and inflammation, respectively. So, oikosalgia and oikosis literally mean the pain or inflammation of the planet which manifests in our body.

The exact mechanism behind this illness is unknown. In fact, it's still a contentious issue whether to call it a 'disease.' In any case, what matters is that it's a very debilitating condition, and we bodyworkers have a role to play in resolving it.

A breakthrough in the treatment of OS was achieved when researchers asked a simple question: 'Who is

getting it?' It soon became clear that OS is predominantly affecting the population in the so-called 'Global North,' particularly among those who identify as 'white.' It's rare in the 'Global South' and almost non-existent among Indigenous communities. These findings, together with anecdotal evidence collected from patients, led to a hypothesis that OS is potentially caused by the fact that the patients, or their ancestral roots, are on the side of causing the climate crisis, and the enormous sense of guilt, whether conscious or unconscious, stemming from it.

Naturally, there has been a huge debate around this hypothesis- some criticised it as 'racist' and 'stigmatising' for patients. Yet, the high prevalence rate of OS among 'white' populations is undeniable, and treatment modalities based on this hypothesis have been reasonably successful.

As you might well know, the golden standard of OS treatment is simple enough: take actions to solve the climate crisis and injustice. For some, it's very clear what they need to do. With some guidance from a primary care physician, psychotherapist or experts in the field, patients identify the crisis they want to focus on, and make steps to be part of the solution. For others, however, their course of action is more difficult to find, and this is where bodyworkers come in.

The challenge of the 'difficult OS patients' (as they are commonly known) is often twofold- they are concerned about so many things and unable to find their focus, and/ or

they feel too helpless and guilt-ridden to take action. These patients are regularly referred to bodyworkers by other health professionals for more in-depth assessment and treatment.

What we do in these situations is first to identify the main location of disfunction and start to gently mobilise the region, using any appropriate techniques. As their body relaxes and releases, patients often have visions- images, sounds or sensations which are deeply imprinted on their body as signs of the climate crisis and injustice. It can be a glimpse of a rural village submerged under water, angry shouts and cries of people over scarce resources, or faces of children in these crises. This is how patients encounter the issue which is closest to their heart.

Oftentimes, the initial reaction of patients is aversion, to look away. Their body tenses up again, and some shake with a sob. At this stage, we focus on communicating the complete acceptance of a patient's whole being through our touch, including their guilt and aversion. Session by session, the resistance becomes weaker and most patients become able to stay with their disturbing vision.

Once a patient reaches this point, while still working with their body, we encourage them to actively 'repaint' their distressing vision by imagining what they can possibly do to change the situation- a thriving, farming village, people sitting in a circle enjoying their meal and the

smiles of children- how would it be possible? Patients find that they can think more hopefully and creatively when their body is relaxed and held. Although there are some variabilities, most patients are ready to take action by the end of several sessions.

This new strand of our profession is generally termed as 'Action-centred Bodywork' as all we do is to prepare the conditions for patients to be engaged with the world. The true healing is in the actions patients take after a treatment. As bodyworkers, we simply walk together taking their hand, assisting them to look deeply into their pain.

This ability to stay with pain is even more important for another group of patients who are frequently, if not most frequently, referred to bodyworkers. That is those who identify as BIPOC (Black, Indigenous, and People of Colour) like myself, and (former) climate refugees like my parents. Invariably, they are residents of the 'North.'

Well, you might find it puzzling that I keep mentioning the colour of our skin and ancestral roots. In the future, probably it will be less relevant, or even unite us. In our time, however, it's still something to divide us.

As I mentioned, OS is most common among 'white' populations. However, BIPOC and refugee populations in the 'North' can also be affected and they react very differently, and often strongly, to the condition.

My mother, for example, started to suffer from idiopathic neck pain and migraines in her mid-forties. She was soon diagnosed with OS, due to the close correlation between her symptoms and real-time indexes of the climate crisis. Her primary reaction was fierce anger. In her mind, OS was a condition of the 'privileged.' Born in a region in the 'South' that was most disproportionately affected by the crisis, her life was all about rising above adversity and serving the greater good. As a humanitarian lawyer, she was dedicated to implementing legal protections for climate refugees.

In cases like hers, 'Action-centred Bodywork' alone might not be enough. For, she needed much stronger support than what a single bodyworker can provide in order to accept and stay with her pain.

In this situation, what is most helpful is to join a patient group. Yes, this might sound trivial, but this is one of the most powerful treatment modalities we have, and it's our important role to identify and connect patients who need communal support.

A patient group is a place where people share their experiences-symptoms, how their lives are affected, visions from individual bodywork sessions, etc.. Sometimes, patients practice meditation and mindful movements under the guidance of bodyworkers. What's at its core is an understanding that healing, and any action, takes a community.

When my mother joined a patient group (after much resistance), she had the opportunity to listen deeply to people who were outside of her social and professional circles. What she discovered was the suffering of 'white' OS patients- their own struggles and losses in this changing world. This opened her heart to fellow citizens she previously saw as 'privileged,' and eventually led my mother to accept her OS. After one of the meetings, she told me how she used to fight against the majority of this country, but from then on, she would fight with people.

I know this sounds controversial, but sometimes it occurs to me that maybe

OS is more of a blessing than a curse for humanity. It inevitably moves us to connect with others, nature and ourselves.

I became more convinced of this idea by witnessing my father's journey through OS. My father, a water engineer, is the most reserved person I have ever known. When he started to experience a strange pain in his shoulders and hips, his immediate reaction was fear. The pain brought him memories of his particularly traumatic exile from his home country, which pushed him deep down to depression and even close to a suicide attempt.





When he eventually joined a patient group, however, his condition took a dramatic turn. Through the group, he met former refugees who had similar backgrounds to him. Some of them were in their late seventies and eighties and knew the different way of living in his home country before the climate crisis intensified. They shared good memories from the old days, and in a sense, became the parental figures he never had.

Now, he is not only on much better terms with his body, but also preparing to travel to his home country, for the first time since his teenage years. What prompted him was an old photograph he was given in one of the patient meetings. It shows a 14th century water wheel that used to bring water from a river to his home village right up until the droughts. The ancient wooden wheel and the symbiotic landscape around it captivated his heart as a water engineer. He is determined to

recreate the flow of life, with his people over there. 'So unlike you,' my mother said smiling, when she heard his determination. Yes, it's incredible to think that it all started from his devastating experience with OS.

I'm also happy to share with you that I'm traveling with my father, as his child and a bodyworker.

It'll be my first visit to the 'South.' Through the journey, I'm hoping to give thoughts to a few big questions: what is OS telling us, really?; what else can we bodyworkers do for people and the planet?: will our work ever be powerful enough to make a difference?

These are rather troubling, but thrilling questions. Are they not?

Anyway, it's a story for another time. For now, this is my job description of bodywork as of 2065.

---

## Eriko Fuji

European School of Osteopathy (2nd year student), Maidstone, UK

*Contact:*

[f.eriko@hotmail.co.jp](mailto:f.eriko@hotmail.co.jp)

---

# FUTUROS ANCESTRAIS: AS CANTADORAS DE HISTÓRIAS

*By Jocyle Ferreira Marinheiro, Raquel Assunção Oliveira, Ana Gretel Echazú Böschemeier, João Diego da Luz Melo, Jaine Oliveira Santos, Nicolas da Silva Nascimento, Maria Arli Correia do Nascimento, Maria Nascimento Oliveira Santos, Tereza Pereira da Silva, Vinicius Claudino Chaves*

## AUPIRU | PRELÚDIO

O crepúsculo precede o ritual em memória dos que se foram sadios. Os medos nos abandonaram e hoje, após um século do último genocídio, dançamos num solo nosso, um mundo novo ancestral, Ywaka pisasú. Escuto ao longe os parentes que nos visitam e me preparo para relembrarmos o ontem e celebrar o agora. A Jandaia canta meu nome:

- Alaya!

Musapiri Sá suiwara 2087 | 3ª colheita de 2087

A Jandaia emite sons de um credo que nunca ouvi. Mas, eles não poderiam ser mais compreensíveis. Entendo com meus ouvidos, mas também com meu ventre, meu sangue e meus dentes. Meu corpo reverbera.



*Creio na lua  
Creio nas estrelas  
Creio nas nuvens  
Creio no sol, no vento, na água e no fogo  
Acredito no arco celeste  
Adoro as pedras  
Amo as matas e os passarinhos  
Admiro os bichos, não digo nada com a  
chuva que molha nosso feijão  
Não tenho medo do trovão porque dá  
chuva pra gente  
Não digo más palavras  
quando está chovendo, relampejando e  
trovejando  
Não quero ver o Sete Estrelas no mês de  
maio, porque não alcanço o outro ano  
Respeito o papai e a mamãe quando eles  
respeitam a gente  
Acredito nos mais velhos  
Porque eles são as pessoas da ciência  
Acredito em tudo que é prático  
Somos povo do fogo*

Atraídos pelo canto, vêm todas as crianças, plantas, jovens, adultos/as, animais e anciãos/ãs da comunidade. Humanos e não humanos. Todos/as eles pareciam ter entendido o que foi

cantado pela Jandaia. Um vento, ao mesmo tempo forte e delicado, nos abraçou. É isso: o futuro é agora. Com os olhos da alma, viajamos ao ontem para honrar os nossos, aqueles/as que resistiram e cujo sangue doado nos permitiu a vida.

Em círculo, nos reunimos. Apesar da polifonia de idiomas, as palavras que saíam de minha boca eram recebidas com clareza no corpo daquele/a que as ouvia, e vice-versa. Era nítido: estávamos em celebração. O agora apresentava-se como uma verdadeira graça. E foi por meio delas que encontramos a linguagem ideal para elaborar o que vivíamos.

Em meio a tantos sons, uma melodia suave engatinha em nosso íntimo, acalanto. O ar torna-se nostálgico. Os pássaros celebram. A brisa é leve, saudosa. O solo é grato.

Mirando toda a luta e sangue derramado no passado, nos demos conta: é uma alegria viver em 2087. Iniciamos a história de nossos antepassados. Dos seus sonhos, somos a realidade. Juntos, começamos a presentear uns aos outros com dádivas do presente:

## COLI

Nossas terras estão demarcadas, nossos povos têm seus direitos garantidos, com suas áreas preservadas e suas crianças com direito a um ensino de qualidade em escolas abertas, onde se aprendem vários tipos de ciência, da mão de pajés, professoras/es, educadoras/es populares, lideranças, contadoras/es

de histórias e rezadeiras que sentam na mesma roda para dialogar. Os troncos velhos já não se encantam mais sem realizar seu sonho de ver suas terras demarcadas. Os sonhos dos nossos troncos velhos se tornaram realidade. Como é bom chegar numa aldeia e ver todos/as os parentes felizes com suas terras demarcadas, com saúde de qualidade, com a possibilidade de aprender a partir da própria língua, com acesso a uma tecnologia social que fortaleça nossa conexão com o mundo, com o fortalecimento de um sistema básico de saúde que compreenda a importância da terra, das plantas e dos ciclos nas nossas vidas, com seu lugar sagrado preservado.

Muitos não conseguiram chegar até aqui pra ver, mas onde eles estiverem, estarão dando forças para nós seguirmos lutando e conquistando os sonhos dos nossos povos. "Terras Demarcadas, vida garantida": essa frase significa bastante. Nós, indígenas, com nossas terras demarcadas, temos vidas garantidas, tornamos esse futuro em presente.

As árvores ao nosso redor concordam e resgatam de suas raízes lembranças de seus parentes humanos, defendendo o solo sagrado, assim como a reexistência de um ecossistema maltratado.



## BARRIGUDA (CEIBA SPECIOSA)

*Nas águas que banham a semente,  
Mucunã questiona a primavera  
no sertão  
Uma cantadora de histórias,  
Despe fios do tempo,  
Desvendando tramas de um não agora*

*Assim desatam memórias,  
dores se refazem esperança  
um novo amanhã  
Se revela hoje*

*Na adormecida lembrança  
A Menina e a cobra – irmãs aliadas –  
Unidas num útero fatigado, Separadas à  
luz da recente chegada Tempo, não chore,  
pois o amanhã na história é gozo*

*O pranto se fez canto,  
A dor quis ser abrigo  
Em uma madrugada insone  
A despedida gera vida  
Nasce um Novo Mundo,  
Parentes, cultivos na perda,  
floresceram em força*

*A terra nos abraça  
Um abraço caloroso  
Que nos fortalece,  
nos alimenta  
E dá motivos para agradecer*

*A água nos mata a sede,  
saboreamos nossas conquistas,  
Sede que nos dá a vontade de viver*

*O ar é nossa respiração,  
É sopro de Tupã  
em nossas vidas*

*É um redemoinho  
nos fez entender os ciclos da vida*

*Com os elementos nos batizamos:  
Com o abraço da mãe terra,  
Com o suspiro do vento,  
Com o calor do fogo,  
E com a frieza da água  
Louvamos ao pai Tupã*

*Na seca ou na abundância  
Na presença ou na distância  
este solo é nosso,  
não mais usurpado,  
O território é consagrado*

*Da luta nunca fugindo  
Veio do Jucá nossa defesa  
Em nossas mãos resistindo  
Rompendo as barreiras  
Dos que intentaram pertencer*

*Mais tramas se avizinham  
Combatemos com novos aliados  
Desatamos outros nós  
Resguardando nossa mãe  
E o bem viver comunitário*

*Vivemos nas serras,  
Vivemos nos morros,  
Vivemos até na cidade,  
Estamos em todos os lugares  
Lutamos pelo que é nosso*

*Somos o povo potiguara  
Somos o povo tabajara  
Somos vários povos  
Ecoamos um mesmo desejo*





## ZABEL

Hoje vivemos bem melhor que antes, temos liberdade, e vamos com tranquilidade colher nossos alimentos e medicinas. Nas épocas do Grande Vírus de 2020, 2031 e 2047 os nossos/as ancestrais iam à feira, mas assustados/as. Mas, hoje a feira é o nosso quintal e só plantamos e colhemos o que precisamos. Superadas as crises sanitárias, os povos se reinventaram, libertando-se da exploração das terras, dos animais e dos humanos. Vivemos e nos encantamos de modo sadio.

## NENÉM

Não há mais cadeados, as portas se foram. A medicina tradicional foi acolhida por mais doutores/as e nos nutrimos com alimentação saudável, sem agrotóxicos (veneno para as plantas na época). A diminuição da poluição radioativa tornou nosso ar mais puro. As febres de agora não queimam como antes. Saúdo a casca de angico [1], o mel de malva, os pés de arruda, bem como as cuidadoras que preservam nossas farmácias vivas.

## OLIVEIRA

Hoje, eu estudo na escola indígena e gosto muito. Nossos costumes são ensinados, e a língua foi resgatada após um longo período de apagamento. Na escola aprendemos sobre o/a outro/a, enquanto descobrimos mais sobre nós. Os preconceitos étnico-raciais e de gênero foram mitigados e, com eles, a opressão. Nossa cultura é abraçada, pertencemos a um solo de igualdade.

## JARA

Pertencemos a um povo guerreiro que realiza seus sonhos diariamente. Temos força e coragem. Nosso povo, que já sofreu muito anos atrás, hoje há mais facilidades. Na luta pela demarcação, vários/as foram aqueles/as que viajaram à procura de melhorias para a aldeia. Conquistamos a demarcação com nosso suor e garra. E, com a terra, conseguimos uma porção de coisas que sonhávamos no passado. Postos de saúde, escolas, universidades, praças e quadras poliesportivas para a educação, diversão e entretenimento já não são mais um sonho: temos tudo isso à nossa disposição.

## KUNHÃ TÃE-BUIA | MENINA-COBRA

Os contos de nossas dádivas ecoam além do presente. Nas nascentes dos rios, nas ondas dos mares, nas manhãs de sol e de chuva, no canto dos pássaros e na alma anciã daquela que sempre resistiu: a Mãe Natureza. Olho para as crianças e percebo os passos que se iniciam. Nossa história se fez arte, dança contínua, regida por aqueles/as que amanhã estarão recontando histórias.

Volto os olhos para mim e me dou conta: meu corpo é como um tronco, cheio de seiva, prenhe de vida. Meus braços e mãos são galhos sem fim. Meus olhos são flores, abrindo e fechando a cada amanhecer. Da boca pendem frutos suculentos. Minhas raízes vão ao encontro das raízes das minhas parentas. E o ciclo serefaz. Menina e cobra se reencontram.

<sup>1</sup> Árvore sul-americana do gênero *Anadenanthera*

## EPÍLOGO

Esta história foi escrita de coletivamente por pesquisadores/as indígenas tabajaras e potiguaras e por pesquisadoras não indígenas reunidos/as em torno de um grupo de trabalho vinculado ao projeto Boas Práticas de Enfrentamento à COVID-19 (Chamada MCTIC/CNPq/FNDCT/MS/SCTIE/Decit Nº 07/2020 - Pesquisas para enfrentamento da COVID-19, suas consequências e outras síndromes respiratórias agudas graves - Processo 403104/2020-3), localizado em três estados do Nordeste brasileiro: Rio Grande do Norte, Paraíba e Ceará.

Os processos de produção do material tiveram lugar sob modalidade online e foram alavancados a partir de discussões locais e instâncias de formação vinculados à saúde coletiva, saúde ambiental, justiça ambiental, interculturalidade e direitos humanos. As lideranças indígenas participantes são das comunidades Serra das Matas e Quiterianópolis, no Ceará. As pesquisadoras que articularam os processos de coescrita são vinculadas à Universidade Federal de Rio Grande do Norte - UFRN (Brasil). As narrativas partem do diagnóstico crítico de um presente realizado através de discussões e do mapeamento de espaços relevantes para as comunidades, como escolas e postos de saúde. A partir disso, foram retratados problemas tais como os avanços da mineração de grande escala e a extinção ou diminuição de espécies da biodiversidade local.

No texto, é ressaltada a importância da preservação da água, da demarcação do território, do saber científico desde a perspectiva da ciência cidadã (Corburn, 2005) e do acesso à clínica e psicologia interculturais. Ele configura-se como um ensaio de fabulação especulativa (Haraway, 2016) vinculada à ciência ocidental em diálogo com os saberes das várias ciências que configuram as culturas indígenas ancestrais do Brasil. Faz parte do gênero hopepunk (Rowland, 2017), costurado com a pedagogia de imaginar futuros através do esperar e inspirado em autores brasileiros como González (1984) e Freire (1996/2004).

Pontuamos que os títulos das seções do artigo estão grafados, além de em português, em nheengatu, conhecido como Língua Geral Amazônica, idioma da família linguística Tupi-guarani pertencente ao tronco linguístico Tupi e falado em regiões do Brasil, Colômbia e Venezuela (Avila, 2021). Conforme o último censo demográfico do país, 76.295 indígenas com 10 anos ou mais de idade falam idiomas do tronco tupi no território brasileiro (IBGE, 2010). Na comunidade Mundo Novo, localizada em Monsenhor Tabosa, sertão do Ceará/Brasil, a retomada do uso do idioma ocorreu a partir de 1997 e, hoje, o nheengatu é língua cooficial do município.

## REFERENCES

Listamos abaixo as referências bibliográficas citadas nesta introdução, aqui propostas para continuar costurando mundos através da construção de futuros possíveis a nível local, regional e global:

Corburn, J. (2019). Street science community knowledge and environmental health justice. MIT Press, Cambridge.

Freire, P. (1996/2004). Pedagogia da autonomia: saberes necessários à prática educativa. São Paulo: Paz e Terra.

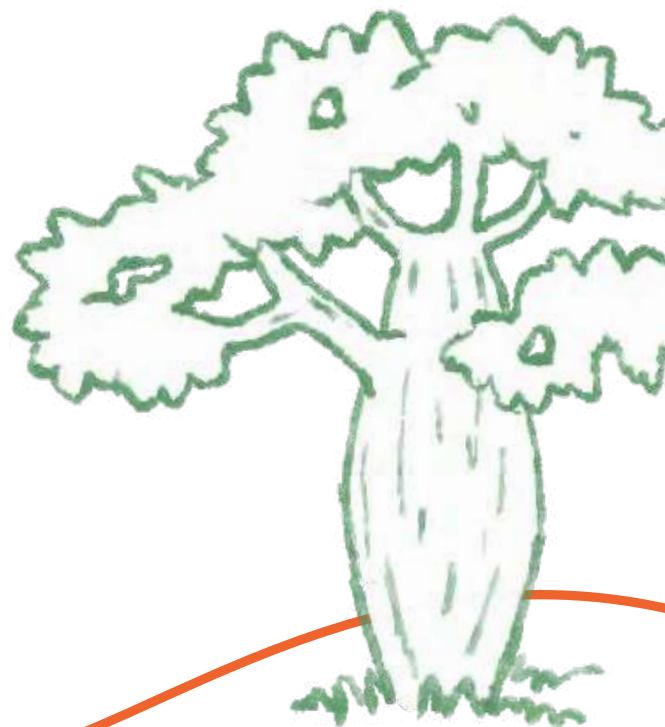
Gonzalez, L. (1984). Racismo e Sexismo na Cultura Brasileira. Revista de Ciências Sociais Hoje: Anpocs. <https://edisciplinas.usp.br/mod/resource/view.php?id=3040030&forceview=1>

Fabulla TV. (2016, May 24). Donna Haraway / Speculative fabulation [Video]. YouTube. <https://www.youtube.com/watch?v=zFGXTQnJETg>

IBGE, Censo Demográfico (2010). <https://sidra.ibge.gov.br/tabela/3483>

Rowland, A. (2018). Hopepunk is the opposite to grimdark. Extravagant & Unlikely. <https://ariaste.tumblr.com/post/163500138919/ariaste-the-opposite-of-grimdark-is-hopepunk>

Avila, M. (2021). Proposta de dicionário nhengatu-português. [Doctoral dissertation, USP]. Digital Library USP. <https://www.teses.usp.br/teses/disponiveis/8/8160/tde-10012022-201925/en.php>



# ANCESTRAL FUTURES: THE STORY SINGERS

*By Jocyle Ferreira Marinheiro, Raquel Assunção Oliveira, Ana Gretel Echazú Böschemeier,  
João Diego da Luz Melo, Jaine Oliveira Santos, Nicolas da Silva Nascimento, Maria Arli Correia do Nascimento,  
Maria Nascimento Oliveira Santos, Tereza Pereira da Silva, Vinicius Claudino Chaves*

## AUPIRU | PRELUDE

The twilight precedes the ritual in memory of the healthy ones. The fears left us and after a century since the last genocide, we dance in our own soil, a new ancestral world, Ywaka piasú. In the distance, I hear relatives visiting us, and I prepare myself to remember the yesterday and celebrate the now. Jandaia sings my name:

- Alaya!

Musapiri Sá suiwara 2087 | 3rd harvest of 2087

Jandaia emits sounds of a creed I've never heard. But, they couldn't be more apprehensible. I understand with my ears, but also with my belly, my blood, and my teeth. My body reverberates.

*I believe in the moon  
I believe in the stars  
I believe in the clouds  
I believe in the sun, wind, water, and fire  
I believe in the celestial bow  
I love the stones  
I love the woods and the birds  
I admire the animals, I don't say  
anything to the rain that moisten our beans  
I'm not afraid of thunder because it  
gives us rain  
I don't say bad words  
when it's raining, lightning, and thundering  
I don't want to see Seven Stars in the  
month of May because I won't reach the  
other year  
I respect mom and dad when they respect us  
I believe in the elders  
Because they're the science people  
I believe in everything concrete  
We are fire-people*

Attracted by the chant, all the children, plants, young people, adults, animals, and elders of the community come. Humans and non-humans. They all seemed to have understood what was sung by





Jandaia. A wind, at the same time strong and delicate, embraced us. That's it: the future is now. With the eyes of the soul, we travel to yesterday to honor our own, those who resisted and whose donated blood allowed us to live.

In a circle, we gather. Despite the polyphony of languages, the words that came out of my mouth were clearly received in the body of the person who heard them, and vice versa. It was clear: we were in celebration. The now presented itself as true grace. And it was through them that we found the ideal language to elaborate what we experienced.

In the midst of so many sounds, a soft melody flows through us, a lull. The air becomes nostalgic. The birds celebrate. The breeze is light, nostalgic. The soil, grateful.

Looking at all the struggle and bloodshed in the past, we realized: it's a joy to live in 2087. We started the story of our ancestors. Of your dreams, we are the reality. Together, we began to gift each other with blessings of the present:

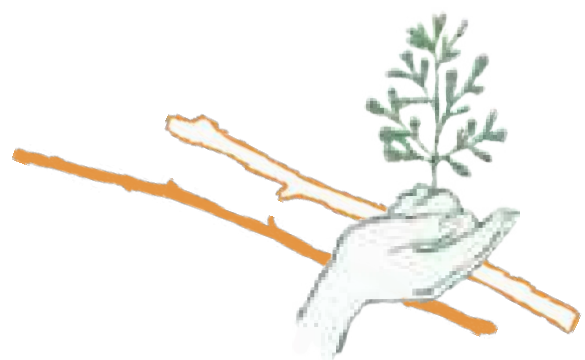
## COLI

Our lands are demarcated, our peoples have their rights guaranteed, with their areas preserved, and their children are entitled to quality education in open schools, where various types of science are learned, from the hand of shamans, teachers, folk educators, leaders, storytellers, and prayers who sit in the same circle to dialogue. Old trunks are no longer enchanted without fulfilling their

dream of seeing their lands demarcated. The dreams of our old tree trunks became true. How good it is to arrive in a village and see all the relatives happy with their demarcated lands, with quality health, with the possibility of learning from their own language, with access to a social technology that strengthens our connection with the world, with the strengthening of a basic health system that understands the importance of earth, plants, and cycles in our lives, with their sacred place preserved.

Many have not managed to get here to see it, but wherever they are, they will be giving us the strength to keep fighting and conquering the dreams of our people. "Demarcated Lands, guaranteed life": this phrase means a lot. As Indigenous people, with our demarcated lands, we have guaranteed our lives, making this future into the present.

The trees around us agree and rescue memories of their human relatives from their roots, defending the sacred ground, as well as the re-existence of a battered ecosystem.



## BARRIGUDA (CEIBA SPECIOSA)

*In the waters that bathe the seed,  
Mucunã questions spring in the desert  
A singer of stories,  
Strip the threads of time,  
Unravelling plots of a not now*

*So they unleash memories,  
pain is remade in hope  
a new tomorrow  
reveals itself today*

*in the sleeping memory  
The Girl and the snake – allied sisters –  
United in a weary womb,  
Separated in the light of recent arrival  
Time, don't cry,  
because tomorrow in history is joy*

*The weeping became a song,  
The pain wanted to be shelter  
In a sleepless morning The farewell  
generates life  
A new world is born,  
Relatives, crops in loss,  
bloomed in strength*

*the earth embraces us  
a warm hug  
that strengthens us,  
feeds us  
And gives reasons to be thankful*

*Water quenches our thirst,  
we savor our conquests,  
Thirst that gives us the will to live*

*The air is our breath,  
It's Tupã's breath  
in our lives  
it's a whirlpool  
made us understand the cycles of life*

*With the elements we are baptized:  
With the embrace of mother earth,  
With the sigh of the wind,  
With the heat of the fire,  
And with the coldness of the water  
We praise Father Tupã*

*In drought or in abundance  
In the presence or in the distance  
this soil is ours,  
no longer usurped,  
The territory is consecrated*

*From the fight never running away  
Our defence came from Jucá  
In our resisting hands  
breaking the barriers  
Of those who tried to belong*

*More plots are ahead  
We fight with new allies  
we untie other knots  
protecting our mother  
And community good living*

*We live in the mountains,  
We live in the hills,  
We even live in the city,  
We are everywhere,  
We fight for what is ours*

*We are the Potiguara people  
We are the Tabajara people  
We are several people  
We are all echoing the same desire*

## ZABEL

Today we live much better than before, we have freedom, and we go peacefully to collect our food and medicines. In the times of the Great Virus of 2020, 2031, and 2047 our ancestors went to the fair but were scared. Today the fair is our backyard and we only plant and harvest what we need. Overcoming the health crises, people reinvented themselves, freeing themselves from the exploitation of land, animals, and humans. We live and love ourselves in a healthy way.

## NENÉM

No more padlocks, the doors are gone. Traditional medicine was accepted by more doctors and we nourished ourselves with healthy food, without pesticides (which were the poison for plants at the time). Radioactive pollution decrease has made our air cleaner. The fevers of now don't burn like they used to. I salute the angico [1] bark, the mallow honey, the rue trees, as well as the caregivers who keep our pharmacies alive.

## OLIVEIRA

Today, I study at the Indigenous school and I really like it. Our customs are taught, the language has been rescued after a long period of erasure. At school, we learn about each other, while discovering more about ourselves. Ethnic-racial and gender prejudices were mitigated and, with them, oppression is gone. Our culture is embraced, we belong to the soil of equality.

## JARA

We belong to warrior people who make their dreams come true on a daily basis. We have strength and courage. Our people, who suffered many years ago, are now more comfortable. In the struggle for demarcation, several were those who travelled in search of improvements for the village. We conquered demarcation with our sweat and determination. And with the land, we get many things that we dreamed of in the past. Health centers, schools, universities, public squares, and sports courts for education, fun, and entertainment are no longer a dream: we have all of it at our disposal.

## KUNHÃ TÃE-BUIA | SNAKE GIRL

Tales of our blessings echo beyond the present. In the springs of rivers, the waves of the seas, during sunny and rainy mornings, the singing of birds, and the ancient soul of the one who has always resisted: Mother Nature. I look at the children and notice the steps that begin. Our history became art, continuous dance, governed by those who will be retelling stories tomorrow.

I turn my eyes to myself and realize: my body is like a tree trunk, full of sap, pregnant with life. My arms and hands are endless branches. My eyes are flowers, opening, and closing every dawn. Juicy fruits hang from my mouth. My roots meet the roots of my relatives. And the cycle keeps repeating itself. Girl and snake are reunited.

<sup>1</sup> South American tree of the genus *Anadenanthera*

## EPILOGUE

This story was written collectively by Tabajara and Potiguara Indigenous researchers and by non-Indigenous researchers gathered around a working group linked to the Best Practices Facing COVID-19 project (Call MCTIC/CNPq/FNDCT/MS/ SCTIE/Decit N° 07/2020 - Process 403104/2020-3), located in three states from Northeastern Brazil: Rio Grande do Norte, Paraíba and Ceará. The production processes of the materials took place online, and were leveraged by local discussions linked to collective health, environmental health, environmental justice, interculturality, and human rights. The participating Indigenous leaders belong to the Serra das Matas and Quiterianópolis communities in Ceará state. The researchers who articulated the co-writing processes are linked to the Federal University from Rio Grande do Norte - UFRN (Brazil). The narratives start with a critical diagnosis of the present carried out through discussions and mapping of relevant spaces for communities, such as schools and health centers. In addition, problems such as the advances of large-scale mining and the extinction or decrease of species of local biodiversity are portrayed.

The text emphasizes the importance of water conservation, territorial demarcation, scientific knowledge from the perspective of citizen science (Corburn, 2005), and access to intercultural psychological/health care. It is configured as an essay along the terms of speculative fabulation (Haraway, 2016) linked to Western science in dialogue with the knowledge of the various sciences from the ancestral Indigenous cultures of Brazil. It is part of the hopepunk genre (Rowland, 2017), stitched together with the pedagogy of imagining futures through hope, inspired by Brazilian authors such as González (1984) and Freire (1996/2004).

The titles of the sections of the article are spelled in Nheengatu, known as Língua Geral Amazônica, a language of the Tupi-Guarani linguistic family belonging to the Tupi language and spoken in regions of Brazil, Colombia, and Venezuela (Avila, 2021). According to the last demographic census of the country, 76,295 Indigenous people aged 10 years or more speak variations of the Tupi language in the Brazilian territory (IBGE, 2010). In the Mundo Novo community, located in the hinterlands of Ceará/Brazil, the resurgence of the use of the language began in 1997, leading Nheengatu to be the co-official language of the municipality nowadays.



## REFERENCES

Below are the quoted bibliographic references, building possible futures at the local, regional, and global levels:

Corburn, J. (2019). Street science community knowledge and environmental health justice. MIT Press, Cambridge.

Freire, P. (1996/2004). Pedagogia da autonomia: saberes necessários à prática educativa. São Paulo: Paz e Terra.

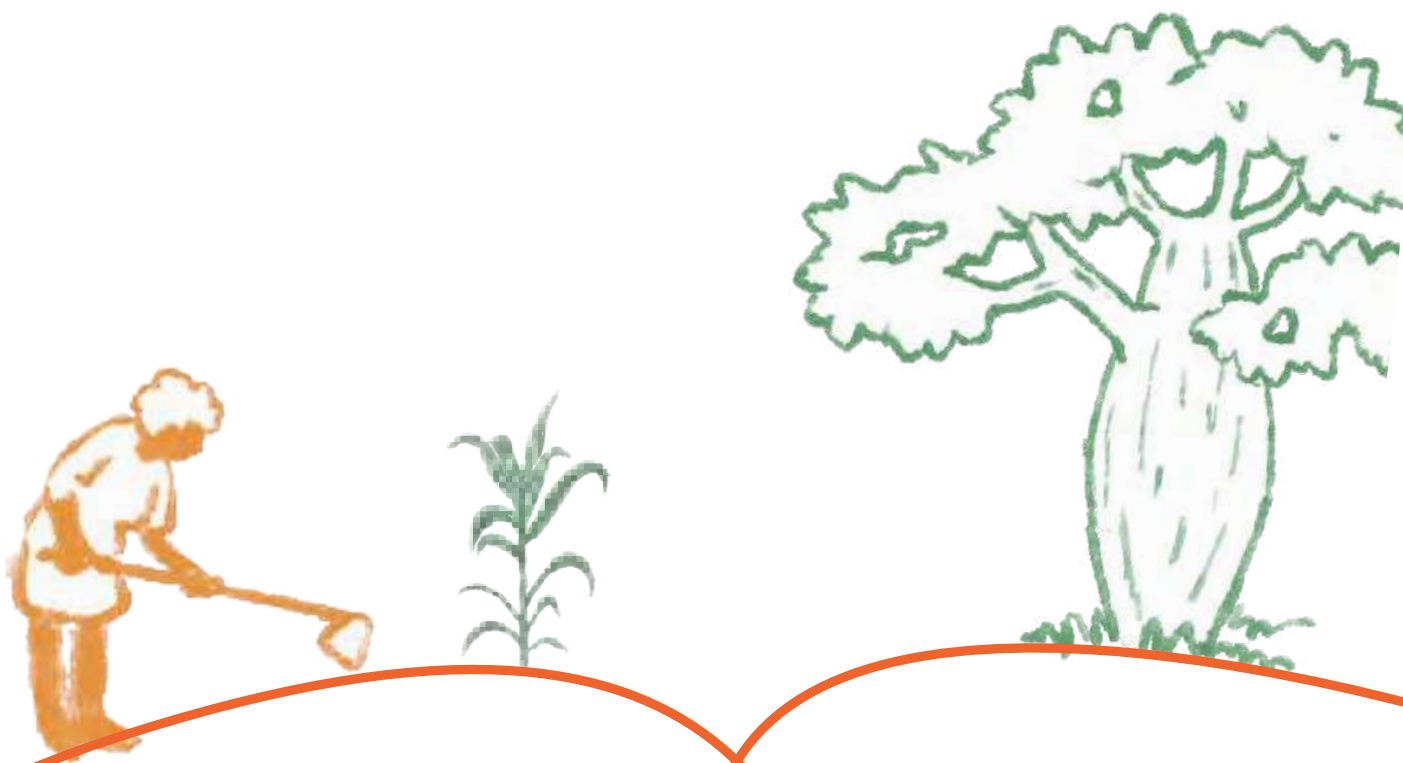
Gonzalez, L. (1984). Racismo e Sexismo na Cultura Brasileira. Revista de Ciências Sociais Hoje: Anpocs. <https://edisciplinas.usp.br/mod/resource/view.php?id=3040030&forceview=1>

Fabulla TV. (2016, May 24). Donna Haraway / Speculative fabulation [Video]. YouTube. <https://www.youtube.com/watch?v=zFGXTQnJETg>

IBGE, Censo Demográfico (2010). <https://sidra.ibge.gov.br/tabela/3483>

Rowland, A. (2018). Hopepunk is the opposite to grimdark. Extravagant & Unlikely. <https://ariaste.tumblr.com/post/163500138919/ariaste-the-opposite-of-grimdark-is-hopepunk>

Avila, M. (2021). Proposta de dicionário nnhengatu-português. [Doctoral dissertation, USP]. Digital Library USP. <https://www.teses.usp.br/teses/disponiveis/8/8160/tde-10012022-201925/en.php>



---

**Jocyle Ferreira Marinheiro<sup>1</sup>**

<https://orcid.org/0000-0001-5821-160X>

**Raquel Assunção Oliveira<sup>1</sup>**

<https://orcid.org/0000-0001-9876-7151>

**Ana Gretel Echazú Böschmeier<sup>1,2</sup>**

<https://orcid.org/0000-0003-0792-1307>

**João Diego da Luz Melo<sup>3,4</sup>, Jaine Oliveira Santos<sup>5,6</sup>, Nicolas da Silva Nascimento<sup>5,7</sup>, Maria Arli Correia do Nascimento<sup>3,7</sup>, Maria Nascimento Oliveira Santos<sup>5,9</sup>, Tereza Pereira da Silva<sup>3,8</sup>, Vinicius Claudino Chaves<sup>1</sup>**

<sup>1</sup>Universidade Federal do Rio Grande do Norte, Brasil

<sup>2</sup>Projeto "Boas Práticas de Enfrentamento à COVID-19" (CNPq)

Universidade Federal do Rio Grande do Norte, Brasil

<sup>3</sup>Liderança indígena jovem do povo potiguara, Ceará, Brasil

<sup>4</sup>Escola Povo Caceteiro na aldeia Mundo Novo, Ceará, Brasil

<sup>5</sup>Liderança indígena jovem do povo tabajara

<sup>1</sup>Centros Integrados de Educação Pública, Ceará, Brasil

<sup>7</sup>Recursos Hídricos e Meio Ambiente, Monsenhor, Tabosa, Ceará, Brasil

<sup>8</sup>Escola Indígena Povo Caceteiro na aldeia Mundo Novo, Monsenhor Tabosa, Ceará, Brasil

<sup>9</sup>Município de Quiterianópolis, Ceará, Brasil

*Contact:*

[jocylemarinheiro@gmail.com](mailto:jocylemarinheiro@gmail.com)

[assuncao.raqueloliveira@gmail.com](mailto:assuncao.raqueloliveira@gmail.com)

[gretigre@gmail.com](mailto:gretigre@gmail.com)

[melodiego662@gmail.com](mailto:melodiego662@gmail.com)

[ojaine168@gmail.com](mailto:ojaine168@gmail.com)

[nascimento.nicolas107@gmail.com](mailto:nascimento.nicolas107@gmail.com)

[sibapovocaceteiro2016@gmail.com](mailto:sibapovocaceteiro2016@gmail.com)

[sandraoliveira2@gmail.com](mailto:sandraoliveira2@gmail.com)

[teresinhapereira1951@gmail.com](mailto:teresinhapereira1951@gmail.com)

[viniciusclaudine@gmail.com](mailto:viniciusclaudine@gmail.com)

---

The additional illustrations accompanying 'STORY TITLE' were created in a collaborative way from drawings and photographs taken by indigenous research leaders that have co-authored this Healthpunk story.

# NIGHT SWIMMING

*By David A. Nicholls*

It took me four days to reach Sallar.

Even travelling during the day, when all of the office workers are asleep and the streets hum with the sound of the misting turbines, your progress is slowed by the fractious meanderings of the street sweepers, delivery drones, and maintenance trucks.

But as you leave the city, the noise lessens, the air clears, and the sun pours down.

It baked for four days while I walked and hitched my way through the parched countryside. But as I approached Sallar the colours changed with the landscape. There were yellows, greens, and reds. I could hear birdsong and water running. And there were date palms, lemon trees, and umbrella-shaped acacias everywhere.

I'd come to see a friend, but also to see this place that Ku had told me so much about. Sallar was a collection of earth huts and cob houses spread out over a long flat-bottomed valley as lush as an oasis.

Everyone who lived there seemed to glow like a freshly picked peach. And you could tell, even under their sun hats and boubous, that they were fit and strong.

The valley drained like a bath into a large pond, and different gardens fanned out along the valley floor. There were reed beds with water birds, soft green rice fields, food crops sheltering in the shade of the acacia trees, and fields of bananas, persimmons, and almonds.

The work of tending the gardens was done at night when the air was cool, so the day began at sunset as people slowly made their way to the pond and talked about the night ahead.

"Before you do anything else, you'll need to meet Moyo," Ku said. "Moyo runs the gardens, and she'll show you around."

Moyo wasn't hard to miss. Dressed head to toe in yellow and gold, she glowed in the moonlight.

"Ku tells me you're staying with us for a few weeks," she said, taking my

hands and turning them over. "They're too soft. But we'll soon sort that out." And then that cheeky smile that I came to know so well.

And so we got to work. Night after night, tending, pruning, planting, and harvesting. And as the sky began to glow with the early morning sun, we would return to the pool to eat, doze, and pack the stores with our night's harvest.

It was on one of those early mornings that Ku told me that they'd all been waiting for me to arrive.

"We need your help, Dee. You've seen Moyo struggling to get around. She needs an operation, and we've all chipped in to get it done, but it's so expensive these days, and we didn't have enough for the whole package. We need someone to show us how to do the rehab with her afterwards. Can you help?"

"Of course," I said. "Whatever you need."

So, that morning, Moyo made her decision and the RSC was booked.

It arrived within the hour. Shiny chrome and tinted glass.

All Moyo had to do now was to decide when she wanted the op.

At 10 o'clock that night, she opened the door at the back of the shiny cabin that doubled as the autonomous Remote Surgical Centre, and gingerly stepped inside.

Because everything from intubation to implant was done by computer now, Moyo's operation was smooth sailing. The surgical 'brain' took the images, checked Moyo's bloods, screened her medical notes, and monitored her recovery, while the robot arms cut and closed with the precision of, well, a robot.

Four hours later, she was sitting up in bed, complaining that we still hadn't finished the olive harvest.

The next night, we took Moyo down to the pool. It was a festival night, and there was food and wine and music and dance.

Ezster had made Fesenjan for everyone, and

I showed her two children how to massage beeswax and buchu flowers into Moyo's legs.



I showed Ku and her son Faddey how to build Moyo's muscles back up after years of pain, and cautioned her to watch for tree roots and soft ground. We bathed in the pool when the wound healed, and we hung lights in the trees over the obstacle course I'd built for her in the bush.

We knew she was getting better when she started supervising the work we were doing digging the new swales up on the hillside. It's not an easy climb up there, but she was



determined to see it done properly, and I think, secretly, she wanted to show us she was strong again.

I stayed in Sallar for six weeks. And in that time I met an elderly man who couldn't remember his daughter's name, a woman who's arm hurt so much she could no longer wield her axe, a boy who couldn't breathe, and a little girl with stiff, painful legs.

I tried to help them all as much as I could and, in return, they gave me food, a soft bed, and starlight like you've never seen.

I learnt that you sometimes have to be tough with a lemon tree, and that some plants just need patience. I learnt that there's no beginning or end to healthcare, and that one woman's sweet is another man's bitter.

Towards the end of my stay, Rab asked if I could help a friend of his along the valley. She was a weaver, but was struggling to work now because of constant neck pain.

So, two nights later, I said my goodbyes, and headed off down the valley, with harder hands, for sure, but also a much softer feeling about my place in the world.

I'll go back to the city, for sure. But I've found a place here that gives me everything I need: the hospitality of good friends, cool air and the gentle night breeze, and the give-and-take of helping and being helped.

---

**David A. Nicholls**

<https://orcid.org/0000-0001-9925-9810>

School of Clinical Sciences, Auckland University of Technology,  
New Zealand

*Contact:*

[davidicholls@aut.ac.nz](mailto:davidicholls@aut.ac.nz)

---

# HOMO SAPIEN

*By Bailey Davis*

A gentle breeze picks up, kisses his skin and carries some loose strands of dirty blonde across his cheek. They catch in his beard. He slowly tucks the strays behind his ear, mindful not to move too quickly, and cranes his neck, allowing his eyes to follow the individual. They round the corner of the building and disappear from sight. Were they carrying something?

His stomach growls as he carefully settles back into the hiding spot he constructed. A stick from his backrest digs into him, uncomfortable, he shifts. His stomach demands attention; hunger is no stranger and the consequential pains, his constant companion, remind him that he is alive.

Who were these people he had been surveying for the entire moon cycle? They were a strange group – seemingly boundless in energy, never hungry, and in perfect health. Most interesting of all was their skin which seemed to be painted in various colours – red, brown, grey, green – each person slightly different, like himself.

Other than their routine breaks – where they would faithfully emerge in droves to bask in the warmth of the sun – they kept busy around their compound. Doing what though? Of that, he was not sure as he knew of very little outside the search for food.

In his community there had been gatherings, mostly to relay information and share resources. On occasion, they would have a large celebration with a magnificent fire; these events would, in their own way, extend far into the night – the monstrous flames licking away at the darkness and the gathering breaking the dawn. Celebrations were rare. Most of their time was preoccupied with gathering food – greens, nuts, and berries – and hunting; healthy animals were hard to find.

His thoughts return to the spear he had been sharpening prior to the emergence of the individual. He reaches for the sturdy stick and studies the point, satisfied with the sharp tip, he then examines the shaft; it was still wearing some blood from the rabbit he caught at half moon. He fell into good fortune with finding food here after being exiled from his community.

He was cursed. Or worse, infected with a sickness, people said, as an orange crust-like layer developed on his skin by his shoulder. Not knowing what this was, his community turned him away for fear that his sickness would spread and decimate them.

He glances at the orange crust, now engulfing his right shoulder in beautiful concentric circular patterns. Since last full moon, it spread further down his arm towards small islands of bright green leaf-like lobes developing on his hand. It reminds him of the growths found on trees and rocks, lichen was what his mother called it.

Longing for his attention, his stomach growls again. Louder this time. He acquiesces and emerges from his hideout. Crouching low, he makes his way to the climbing structure; it feels gritty and leaves reddish-brown specks on his palms as he makes his way down. He descends into the growth below where tall grasses and some young trees escape through breaks in the hard rock-like ground. He stops to survey his surroundings. Convinced of his solitude, he heads toward the strange lightning bolt and sun. This is where he had been lucky with his previous hunt.

\*\*\*

"He must be hitting low energy. Yanaw turns from the mini-screen to face Vish. "It has been fifteen days since he last consumed protein matter and aside from a narrow selection of plant matter, Community has not observed consumption of anything else."

Vish looks up thoughtfully, "Did Liyat save anything from the feeding?"

"No, it was entirely consumed. Liyat was observed working on their spear earlier. Community needs to decide if another *Sylvilagus floridanus* is to be prepared."

"Honestly?! Consuming *Sylvilagus floridanus*? What an animal!" Yanaw and Vish turn, surprised, to find Lycho standing in the doorway to the small lab.

"Lycho!" Vish exclaims, "You're back. How was the tour of Caregrounds QC5340CAN?"

"Never mind my tour right now. Why are we facilitating energy transfer to a *Homo sapien sapien*? To keep it alive? Has their species not been destructive enough? I thought our mandate was to not interfere and let their kind suffer with what they've created."

Somewhere along the way, the *Homo sapien sapien* species, or Saps for short, lost their way. Propelled by greed, many populations fragmented and became disconnected; their domination created a world so ill it could no longer support their health. These Saps relied heavily on specific individuals called doctors – known as body mechanics in Community – for their wellness.

Yanaw enjoyed being a body mechanic. It was a straightforward job and they liked the hands-on aspect of repairing physical bodies – broken bones, lacerations, damaged

organs, symbiont loss. There was a certain satisfaction in being able to restore something physical to its near original condition. However, they also held great respect and reverence for the healing powers of Community energy workers and earth connection.

For an era, the majority of Saps ignored and turned away from these healing elements and they attempted to stamp out those who held tightly to this knowledge, to the peril of their species. They collapsed and it was of their own creation. They neglected to acknowledge the direct link between human health and the wellbeing of all relations – living and non-living. They were too disconnected to understand that caring for and protecting their environment is the foundation of healthcare. Humans are the environment; the environment is them.

Immediately before their downfall, there had been no way to avoid consuming environmental pollutants, the toxins were everywhere and in everything – glyphosate, fluoropolymers, phenols, parabens, phthalates, pharmaceuticals and their metabolites ... the list was endless. A vast majority of Saps became sterile and overrun with cancers. Their nervous systems ceased to function properly. Their intestines leaked and their immune systems crashed. The consumption of all the contaminated matter caused them intense physical pain and sickness with starvation being the only alternative.

This was when the Homo sapien symbiosis species, or Syms, flourished, as they had very little requirement for matter owing to their photobiont and mycobiont partners. Syms were able to obtain energy from the sun through their symbiotic relationship, which also provided them with nutrients. They were able to maintain near perfect health without having to ingest poisonous matter. They advanced and expanded upon the existing technologies at that time and they focused on environmental remediation, recognized by them to be healthcare, while the remaining Saps deteriorated, regressed, and quarreled amongst themselves. Yanaw and their species focused on caring for the great Mother, nursing her back to health, for her health was their health and she produced any medicine they could ever want for.

“But THIS Sap is interesting, Lycho. Read the report, I’ll put it up.” Yanaw quickly turns to the mini-screen and makes a gentle swiping motion across the glass surface with their hand. Beside them, a panel displaying a rich scene of Carolinian forest fades away to words.

Lycho closes their eyes. Anger, ignited by overhearing their conversation about the sacrifice, wells inside them. They draw in deep breaths allowing the feeling to pass. Once calmed, Lycho’s eyes open.

“Let’s see it then.”



## OBSERVATION REPORT NO. ON9406CAN-887-05-2372

### Location:

43°35'50.2"N 79°47'22.1"W  
(Caregrounds ON9406CAN)

**Domain:** Eukarya

**Kingdom:** Animalia

**Phylum:** Chordata

**Class:** Mammalia

**Order:** Primates

**Family:** Hominidae

**Genus:** Homo

**Species:** sapien

**Subspecies:** sapien

**Energetics:** Heterotroph\*

## OBSERVATION LOG

### Entry 1:

Homo sapien sapien (Sap) observed hunting, with spear, on perimeter of Caregrounds ON9406CAN.

Appears to be disease-free and requiring nourishment.

Unaware of Homo sapien symbiosis (Sym) community. Hypothesized to be from tribe Sapien 9 (S9) located 43°43'07.8"N 79°57'25.2"W.

**Entry 2:** Sap subject migrated closer to Sym community. Stalking behaviour indicates a conscious awareness of Community. Aggression assessment: low. No threat posed to Sym community members.

**Entry 3:** Sap subject observed consuming leaves of *Malva sylvestris* and *Taraxacum officinale*.

**Entry 4:** Sap subject has been given the name Liyat. Liyat has started to construct a shelter on the roof of a nearby heritage construct called "Michaels". Continues to consume plant matter: *Malva sylvestris*, *Taraxacum officinale*, and *Trifolium* spp.

**Entry 5:** Liyat unknowingly came within close proximity to community member Hawluk. Hawluk observed that Liyat has typical foliose occurring on the hands and orange crustose on the upper right arm indicating symbiosis. Hypothesis is morphogenesis.

Team has discussed and further observation of Liyat is necessary.

Community to decide if a sacrifice of *Sylvilagus floridanus* is warranted for energy transfer to Liyat to ensure continued observation.

**Entry 6:** Liyat discovered the *Sylvilagus floridanus* on Caregrounds ON9406CAN. Sacrifice occurred. No form of gratitude expression performed by Liyat was observed.

**Entry 7:** ...

Lycho's eyes scan the report absorbing the events of the past month and they settle on Entry 5. Silence holds the lab until Lycho slowly starts, "Are you implying that this Homo sapien sapien...", their words trail off in thought.

"Liyat." Corrects Yanaw, picking up where Lycho faded. "Liyat appears to have a random mutation allowing symbiosis and possibly energetic metamorphosis."

"Well," – Vish jumps in – "this is our current hypothesis. Further observation is required. Entry 17 notes that the symbionts are spreading. Too bad extractive methods have been restricted otherwise we could run the genome."

"Is it?" Yanaw furrows their brow. "Is it too bad we decided against destroying and causing harm to our relations for selfish purposes?"

Vish looks to their shoes.

"The sun is peak, let's go, I need a refresh. We will discuss in Community." Yanaw stands and begins toward the door.

\*\*\*

Vish cradles the soft body in the crook of their left arm as they make their way toward the retired commercial center through a central alley between two looming buildings donning matching suits of degradation. After a long discussion during regeneration, Community decided to provide another *Sylvilagus floridanus* to Liyat, but this time, it was to be one that just passed from natural causes.

Vish stops once they reach the open space, a parking lot in another era. Their eyes drink in the sight of reclamation – generations of trees of varying heights and species stand rooted amongst the busted asphalt, grasses sneak and weave their way through cracks, and vines snake along crumbling concrete walls and up rusted posts. They turn right, away from "Michaels" and make their way through the burge-oning forest, being care-ful not to trip on the jag-ged ground. Their

eyes rest on the word almart

laying on the ground, above

them a giant side-ways W

clings pre-

cariously to the face of the

building; it is kept company

by a small sun-like


logo. A light breeze

musters enough strength to pull a blue leaf of peeling paint from the building. It listlessly flutters to the ground. With a tree standing in the line of sight between them and Liyat, Vish places the small body on the ground. With a hand still on the soft fur, they pause to give gratitude before they stand and continue walking to the end of the building and around the corner.

\*\*\*

Six moon cycles have passed since he first encountered the community. He decided to call them the Sun People. He also decided they were harmless, so he was less cautious with his movements; he freely explored his surroundings but always kept a respectable distance from them.





The Sun People have been leaving offerings for him, every fifteen suns. Recently, his desire for food is waning so the last offering will go untouched by him. Instead, it is given to the sun, the rain, and the wind. It is cherished by the small, black, six-legged creatures who scramble to carry pieces back to their colonies. It becomes a hub of life that the grasses dance around when the wind decides to pick up its music. Slowly, it becomes one with the earth again.

He kneels and leans over the ditch with cupped hands to scoop up some water to splash over his head. He feels the coolness of the liquid as it runs its course over his face and down his neck. He repeats the action, closes his eyes, and again appreciates each individual path the water decides to take to traverse his body. Opening his eyes, he moves closer for a drink and catches a glimpse of himself floating on the stillness of the puddle. He pauses. The growth has consumed his body. His skin is a patchwork of colour, concentric

gradients of orange randomly interrupted by bright greens.

Lichen.

He hears his mother's voice emerge from an old but pleasing memory. He closes his eyes, returns to his childhood, and watches her as she guides his small hand over the bright yellow skin covering the rock. She smiles at him.

It's beautiful.

Somewhere among the moon cycles his long-time companion, stomach pain, bid him farewell. He doesn't eat, yet he has never felt better in his life, full of energy, light and quick on his feet, ready for any task; the natural rhythms of his body bound tightly to the earth and the sun.

END

---

**Bailey Davis**

Population Medicine, University of Guelph, Canada

*Contact:*

[bailey.helena.davis@gmail.com](mailto:bailey.helena.davis@gmail.com)

---

# THE STAND

*By Melissa Bates*

Summer didn't always scare me. I remember, as the first rays gently fell over me, I would reach out to them and they'd bend down to meet me. Leaves would gently sway, soaking up their sustenance and we would all commune in quiet contemplative joy, connected in the warmth of midsummer sun. We dreaded the longer, cooler nights but knew that seasons don't listen to wants and wishes. Once the days got shorter, the community would recede and find our own versions of dormancy in the chilly autumn air. This shift never divided us, but instead brought us together. The shorter days meant sharing resources and ensuring that everyone had the support they needed. We survived with each other, until the year that the summer came early.

Fast and hot, and the once nourishing light began to penetrate the earth and fry the soil. Deep under the surface the water evaporated, and the air began to empty. The space between molecules widened, moisture evacuated the air choking us as we wilted with the grass and the shrubs. Rain clouds came to give relief, but they cried down only tiny droplets,

merely moistening the ground. That summer I lost everyone.

There was nothing to stop the flames. The trees in our community were young and frail, planted there by people who didn't understand the roles of each species and looked only at the potential for profit. They went fast to the heat. I could sense the fire licking towards me, beckoning and taunting me but it didn't succeed. I was made to withstand it, others were not. I tried to reach out, but nothing would stop the inferno rolling through the mountains, rampaging against the patchwork blanket that was left to drape the mountainside. The seasons were angry with those who thought they could replace the forest and that no one would notice, no one would care. It was a massacre.

When the rain finally came and reduced my pain to ashes, I was alone. The summer was never the same after that, the heat was menacing and came too quickly. It left me hardened, unable to move and tied to this place. There was no one to lean on, no one to share with and no one to give to. The burns left scars

and the blackened reminders of that summer seeped into my soul. I learned how to be strong on my own and breathe only as the wind blew by, the solitude began to consume me. I began to get angry at my community for leaving me, angry at the dry and the heat. I hated the sun that once nourished me and now left me to stand on my own.

I was beginning to weaken, but was blinded to it by the vitriol I felt. The snow covered up the new ones, any hint of their arrival was buried under the fresh fall. I kept focus on

my own survival. The

pain of loss kept me from reaching out

to them, but they had each other. They

found ground, and spread out.

I found the young audience

kept me on my best behavior. The

melancholy that was

beginning to make me droop was replaced with a sense of responsibility to find my rigidity and demonstrate the strength that comes with my age. They began to explore, and I could sense their need for guidance and support but the pain of loss caused me to resist their attempts at connection.

In the end, I let them in. It began with the notion that I would only support them, and not grow attached. I didn't think I could learn to rely on anyone again, but I had misunderstood how important their role in my life was. When the solstice came,

I no longer cowered in fear, but instead branched out to provide shade to the newcomers who didn't know the pain of summer's heat. I blocked their calefaction, and they sent me signals of their commitment to our success. I realized the pain I carried was lessened by the connections they were trying to build with me.

My hope was held in our home underground, laying down new roots that stabilized my future and left my fear behind. I began to thank the sun for its feast, and tightened my grip on the next generation that grew around me. Healing came through connection, through the altruistic intentions passed through the earth. I came to accept the change I cannot control by embracing the optimism found in the green saplings. This stand will only thicken, a collection of connections made stronger through each other.





## EPILOGUE

The lessons intended in this story are grounded in connection. The Stand is written from the viewpoint of a deciduous, broadleaf tree. In British Columbia, where the author is from, the climate is warming significantly faster than most other areas in the world. This is a portion of Canada that has also relied heavily on forestry as a main resource industry. Typically, broad-leaf trees have been replanted with faster-growing pine that retains less water and burns hotter and faster than their predecessors. The Mother Tree project illuminated what many Indigenous communities have known; that trees communicate to each other through underground mycelial connections. This network is used to warn of risks and hazards like fungal infections and insect infestations, but also to send out nutrients like nitrogen. The project has shown that trees have kin recognition, preferentially sending support to their offspring. It demonstrates how trees act in reciprocity, shading cross-species trees that have previously gifted them subterranean nourishment. The Stand is meant to evoke the feelings of solastalgia - the nostalgia we all feel for the environment in a time marked by the changing climate - from the perspective of a tree. There are lessons in the reciprocity of plants. This story is meant to shed light on a future where wellbeing and healthcare is centered in the more-than-human perspective, integrating aspects of the larger connections that we are all embedded within.

---

**Melissa Bates**

University of Northern British Columbia, Canada

*Contact:*  
[mbates@unbc.ca](mailto:mbates@unbc.ca)

---



# Commentaries



## RELATIONAL BECOMINGS AND ETHICAL PRACTICES

*By Louise Søgaard Hansen, Trine Schifter Larsen*

It has indeed been an intriguing and fascinating adventure to read these essays on futures filled with hope, love, and relational entanglements with all matters on this planet. Reading the stories raised new visions of what such futures might entail. Alas, before we eventually reach these very different and promising future worlds, most stories predict almost apocalyptic times of disruptions to the worlds as we know them.

In the stories, understandings of health tend to be invisible or implicit. Health is associated with the particular, individual, and bodily, and with larger cycles and connectedness to the planet itself and all living beings. And in many of the futures described, individualism, understood as a neoliberal concept, is dead. Moving away from a liberal tradition in Western philosophy that “centers on a world view in which the rational, autonomous man [sic] accomplishes his [sic] life plan in the public realm. This tradition assumes a theory of self in which people are isolated, in which the self is prior to its activities and to its connections with others” (Fisher & Tronto, 1990

(with reference to Sandel, 1982)). This notion of existence is replaced by connectivity and relational and interspecies becoming and reconfiguration of non-gendered bodies. The ‘I’ is so to speak given to the ‘us.’

In our reading, we see care as a prominent notion on multiple levels and certainly care for/with/towards/ between all living beings is pivotal in the stories, far more prominent than disease/diagnosis/treatment. We see a care concept that comes close to the classical definition as presented by Joan Tronto and Brian Fisher:

On the most general level, we suggest that caring be viewed as a species activity that includes everything that we do to maintain, continue, and repair our ‘world’ so that we can live in it as well as possible (Fischer and Tronto, 1990, 40).

However, instead of being a species activity care also seems to be an interspecies activity, with a focus on creating caring worlds rather than a focus on individual bodies - as a movement from cure to care.

The focus on the individual body and specific diseases is replaced by a focus on global relatedness. The fact that health and disease are left unverballed in most of the stories leaves us with the question of whether these imaginative futures predict or expect a return to the 'natural' and a longing for leaving matters to themselves? And then, what is 'natural,' now that a wide range of treatments and technologies already exist and are working? Are we to stop looking 'into' the body altogether?

In our reading, we sensed the presence of Haraway's thinking of meetings between species and the becoming through symbiogenesis or significant otherness (Haraway, 2007) and entanglements of technological solutions and organic nature or what we will term organic nurture. By reading all the stories one by one, but also reading them through each other, we are inspired to tell a story of our own. Thus, this is our story of health, matters, creatures, and living in the futures:

---

As a result of human's exploitation of all natural resources, Earth has suffered several natural disasters, but new times have dawned. Time is dissolved and thus age as a category and division of living matter does not exist. Past, present, and future times are entangled. Various technologies are available, but time doesn't matter anymore and has therefore lost significance as a form of capital (Bourdieu, 1994) as it used to be in the olden days. Technologies don't

have to optimize processes and with the help of nature, sustainable technologies have been developed while the planet and all living matters have moved into new equilibriums.

## CARE WORLDING(S)

Kim wakes up before the sun rises over the well-being center. Today is the day for the 'growth factor' injection into the broken hip. In about half a cycle the transformation will be completed. They look out the window where the sun slowly rises, and its light starts to glint between the vegetation of the dense forest that covers most of the area. As has been the case so many times before, the rain is heavy and has lasted almost a quarter of a cycle with massive thunderstorms and tornadoes as well, but now the sun has the upper hand, and the warmth of it is felt. Kim thinks back to the accident when they fell off Bina, the horse. They have worked in the wild-growing fruit plantations together through many cycles. The capacity of their intra-relatedness (Barad, 2007) is widespread, and their ongoing bodily transformations (becoming other) increase their ability to create and engage in new relations with their surroundings. It makes Kim confident that these new bodily changes will transform their relational engagements with the world and the new assignment and role they will perform in the community. They think about how, many cycles ago, matters were divided into delimited and binary categories such as masculine and feminine, extrovert and introvert, healthy and unhealthy, and into what

was considered productive and unproductive, and abled and disabled. They recall how communities were built mostly for those who were considered abled and with concerns about how to support their productivity and engagement in society. Today, communities engage with all kinds of bodies, increasing social participation that is not based on ideological practices supporting neoliberal notions of the individual (Wolf-Meyer, 2020). An example that comes to their mind is the shared transportation that accommodates all kinds of bodies, and which is easy to use, no matter how many cycles these bodies have gone through, like their own, for example. Their thoughts continue to revolve around what used to be called 'public transportation.' Shared transportation is the only kind of external, energy-driven transportation that exists.

Kim feels the warmth from the injection in the joint and the sense of entanglement and growth spreading through the body. They are grateful for being in the well-being center. It is both a protective and a stimulating environment to initiate the re-orientation process. When the sun rises again, they will go outside to capture the nurturing and growth-stimulating rays from the sun and begin to adjust their bodily changes to the surroundings. They are not on their own, Bina and the community will participate in this sensory reorientation process.

Kim and Bina are back on the plantation working together. Kim loves this kind of work on the plantation, but they engage more and

more in supervision practices and the interspecies training for which they are increasingly responsible and for which the well-being and coherence of the community are built on. Through the coming cycles, Kim clearly feels their intermingling with other species, especially the surrounding trees. The growth factor helps their body slowly transform from its current shape into other forms of ecological matter. Kim feels the inertia gradually changing the body's movements, and they long for the quietness to settle in. They feel the body's longing to let go and the satisfaction of staying still and taking root, letting their experience and knowledge flow into the earth and engage with the environment. As one cycle replaces the other Kim's and Bina's movements slowly cease while the community keeps caring for their nurturement in collaboration with the sunlight and the little roots growing from their lower bodies. Their roots support their entanglement with Earth and the surrounding plantation which gives them a new sense of intra-relational becoming, responsiveness, and collaborative communication. Kim and Bina have always loved visiting these wise and caring, grand trees for council and support and soon the inexperienced ones will seek comfort under Kim's tree crown while sitting by their wild roots.



## REFERENCES

- Barad, K. M. (2007). Meeting the universe halfway. Quantum Physics and the Entanglement of Matter and Meaning. Duke University Press
- Bourdieu, P (1994). Raisons pratiques. Sur la théorie de l'action. Editions du Seuil,
- Fisher, B.& Tronto, J. (1990). Toward A Feminist Theory of Caring. In: Circles of care: work and identity in women's lives, edited by E. K. Abel and M. K. Nelson. State University of New York Press, Albany, N.Y.
- Haraway, D. J. (2008). When species meet. University of Minnesota Press
- Wolf-Meyer, M. (2020). Recomposing Kinship. Feminist Anthropology 1 (2): 231–47. <https://doi.org/10.1002/fea2.12018>

---

**Louise Søgaaard Hansen**<sup>1</sup> (corresponding author)  
<https://orcid.org/0000-0001-6119-947X>

**Trine Schifter Larsen**<sup>1,2</sup>  
<https://orcid.org/0000-0001-5410-7987>

<sup>1</sup>Department of People and Technology, Roskilde University, Denmark

<sup>2</sup>Clinical Research Department and Department of Orthopaedic Surgery, Copenhagen University hospital, Denmark

*Contact:*  
[losoha@ruc.dk](mailto:losoha@ruc.dk)  
[tslarsen@ruc.dk](mailto:tslarsen@ruc.dk)

---

## EASIER TO IMAGINE

*By Ben Brisbois*

*He says there aren't any easy answers. I say he's not looking hard enough!*  
-Bart Simpson

The moving stories collected in healthpunk provide a wealth of ideas for imagining and realizing healthier futures in the face of looming global crises. As a researcher and educator in public health I immediately thought of challenges to this task posed by Western biomedical professions and the ways of knowing they have generated. In this commentary I explore what I see as the most important such obstacle: capitalism.

It is easier to imagine the end of the world than the end of capitalism. This quote, usually attributed to Fredric Jameson, captures how concern over climate change and other looming disasters often jumps to post-apocalyptic visions of civilization crumbling, rather than imagining changes to the capitalist power structures that got us here. Slavoj Žižek describes apocalyptic films where our subconscious desire to escape those capitalist structures finds misplaced expression in disasters that just blow the whole

thing up, but where market structures are magically resilient “as if, even after a global cataclysm, capitalism will somehow continue” (Žižek, 2011, p. 334). ‘The Anthropocene’ as a concept conveys a related lack of understanding of the actual nature and history of capitalism. It holds that our current era began sometime in the late 19th century despite apocalyptic and much earlier impacts of capitalism’s globally imperialist spread, such as the massive environmental change and human devastation that accompanied European colonization of the Americas (Davis and Todd, 2017). In public health, fields such as planetary health channel Anthropocene worries into new academic empires and interventions that envision the continuation or even intensification of capitalism. The dominant Rockefeller Foundation version of planetary health, for example, looks at the disastrous consequences of industrial development and proposes...more capitalism, in the form of financialized investment vehicles and (patentable) technological innovations (David et al., 2021). Planetary health may thus represent

yet another “colonial proposal for preserving the capitalist order in the face of the perceived need to avoid environmental deterioration and its impacts on human health” (Baquero et al., 2021, p. 4).

With even complexity-informed fields in public health appearing to take capitalism’s continuation as a given (and therefore helping to ensure that it is), can health speculative fiction writers do otherwise? Healthpunk authors weren’t specifically asked to, but promising ideas nevertheless emerged. ‘Time’ evokes time’s role in capitalist accumulation, such as factory owners lengthening the working day to extract more value from the bodies of workers (cf. Marx, 1992). After the story’s abolition of measured time, “Work now means completing things that fulfill us but contribute towards maintaining shared assets such as food sources, power sources, life, health, education.” The commodification of land in capitalism is also challenged in ‘Cantadoras de historias,’ in which the lands of the Tabajara and Potiguara peoples in what is today known as Brazil have become demarcated in the healthier future they envision. This rematriation of land underscores the fact that Indigenous control over their own territories has been systematically and disastrously eroded for over five centuries in the Americas by the rapacious spread of Eurocentric capitalism, at the same time as that spread was creating the climate crisis (Moore, 2017; Rivera Cusicanqui, 2012). ‘A note to future bodyworkers’ portrays white

privilege as an actual source of embodied illness, “potentially caused by the fact that the patients, or their ancestral roots, are on the side of causing the climate crisis, and the enormous sense of guilt, whether conscious or unconscious, coming from it.” This condition evokes Martinican psychiatrist Frantz Fanon’s observations on the psychological distress experienced by agents of French colonial violence in Algeria, and calls to mind the inextricably white supremacist nature of actually-existing capitalism (Fanon, 2004; cf. Pulido, 2017). These examples thus show that healthpunk’s authors are not limiting themselves to the status quo futures that public health finds easier to imagine.

Given how economic growth is fueled (literally), a related challenge involves energy and the ways in which it is obtained. Electricity rationing and energy-producing mood bracelets in ‘If we could turn our emotions into light’ and the photosynthetic post-humans of ‘Homo sapien’ show healthpunk authors wrestling with such difficult questions, which go well beyond fossil fuel combustion and its inequitably-distributed climate impacts. The hugely unfair environmental and social justice implications of renewable energy include land grabbing for biofuels and solar and wind farms, and ‘extractivist’ development models based on large-scale mining of the components of renewables. That the costs and benefits from such economic activities flow along centuries-old racialized, gendered

and ecocidal channels dug by Euro-American imperialism demonstrates the importance of confronting 'CO2lonialism' and the futility of trying to do so using markets and assumptions of endlessly growing economies and energy demands (Dunlap, 2018; Hazlewood, 2012).

Avoiding the trap of such easy answers in imagining healthier futures will likely be complicated by the biomedical ways of knowing in which many of us are schooled. Medicine's historical co-evolution with capitalism saw it adopt a focus on individual behavioural and technical factors that would not ruffle feathers by challenging societal power structures (Turshen, 1977). Medicine simultaneously evolved the 'subject positions' which biomedical professionals can inhabit in society – as when privileged individuals enter health professions and related academic careers through competitive processes, making investments in capitalism's continuation inherent to life as a healthcare professional (Foucault, 1973). The fact that healthpunk's stories often come from students who are not necessarily committed to such careers may be a helpfully disruptive source of resistance to such investments in the capitalist status quo, whether emotional, intellectual, professional or financial.

Such resistance would also need to transcend other 'easier to imagine' tendencies, such as biomedicine's focus on discrete, commodifiable medical interventions and technologies that can be deemed evidence-based (and high impact-

factor publications about them). This focus enables careers as successful health professionals and 'academic capitalists,' but misses opportunities for societal changes that would vastly improve health. For example, holistic understandings of social and ecological determinants of health such as those long held by Indigenous peoples around the world were casualties of biomedicine's reductionist co-dependency with capitalism (Redvers et al., 2020). Health in 'Cantadoras de historias,' in contrast, is comprised of reciprocal and caring relationships among plants, animals, winds and ancestors, paralleling Indigenous models of health and land relations in places far from northeastern Brazil (cf. Richmond, 2015). Following this example could lead us to imagine futures in which broad attention to fairness and reciprocity among communities (both human and non-human) hugely reduces the overall burden of disease needing existing or imagined healthcare interventions. Such a future would require profoundly rethinking both the structures of capitalism driving social and environmental injustice and – by extension – the nature of lives in the health professions and disciplines.

## REFERENCES

- Baquero, O. S., Benavidez Fernández, M. N., & Acero Aguilar, M. (2021). From Modern Planetary Health to Decolonial Promotion of One Health of Peripheries. *Frontiers in Public Health*, 9, 637897. <https://doi.org/10.3389/fpubh.2021.637897>
- David, P.-M., Le Dévédec, N., & Alary, A. (2021). Pandemics in the age of the Anthropocene: Is 'planetary health' the answer? *Global Public Health*, 16(8–9), 1141–1154. <https://doi.org/10.1080/17441692.2021.1893372>
- Davis, H., & Todd, Z. (2017). On the Importance of a Date, or, Decolonizing the Anthropocene. *ACME: An International Journal for Critical Geographies*, 16(4), 761–780.
- Dunlap, A. (2018, May 10). End the “Green” Delusions: Industrial-scale Renewable Energy is Fossil Fuel+. Verso Books Blog. <https://www.versobooks.com/blogs/3797-end-the-green-delusions-industrial-scale-renewable-energy-is-fossil-fuel>
- Fanon, F. (2004). *The wretched of the earth*. Grove Press.
- Foucault, M. (1973). *The birth of the clinic: An archaeology of medical perception*. Pantheon Books.
- Hazlewood, J. A. (2012). CO2lonialism and the “Unintended Consequences” of Commoditizing Climate Change: Geographies of Hope Amid a Sea of Oil Palms in the Northwest Ecuadorian Pacific Region. *Journal of Sustainable Forestry*, 31(1–2), 120–153. <https://doi.org/10.1080/10549811.2011.566539>
- Marx, K. (1992). *Capital, volume 1: A critique of political economy*. Penguin Classics.
- Moore, J. W. (2017). The Capitalocene, Part I: On the nature and origins of our ecological crisis. *The Journal of Peasant Studies*, 44(3), 594–630. <https://doi.org/10.1080/03066150.2016.1235036>
- Pulido, L. (2017). Geographies of race and ethnicity II: Environmental racism, racial capitalism and state-sanctioned violence. *Progress in Human Geography*, 41(4), 524–533. <https://doi.org/10.1177/0309132516646495>
- Redvers, N., Poelina, A., Schultz, C., Kobei, D. M., Githaiga, C., Perdrisat, M., Prince, D., & Blondin, B. (2020). Indigenous Natural and First Law in Planetary Health. *Challenges*, 11(2), 29. <https://doi.org/10.3390/challe11020029>
- Richmond, C. (2015). The Relatedness of People, Land, and Health. In M. Greenwood, S. de Leeuw, N. M. Lindsay, & C. Reading (Eds.), *Determinants of Indigenous Peoples' Health* (pp. 47–63). Canadian Scholars' Press.
- Rivera Cusicanqui, S. (2012). Ch'ixinakax utxiwa: A Reflection on the Practices and Discourses of Decolonization. *South Atlantic Quarterly*, 111(1), 95–109. <https://doi.org/10.1215/00382876-1472612>
- Turshen, M. (1977). The political ecology of disease. *Review of Radical Political Economics*, 9(1), 45–60.
- Žižek, S. (2011). *Living in the end times*. Verso.



---

**Ben Brisbois**

<https://orcid.org/0000-0002-1947-5490>

School of Health Sciences, University of Northern British Columbia

*Contact:*

[brisbois@unbc.ca](mailto:brisbois@unbc.ca)

---

# SCIENCE FICTION: A HEALTHY PREOCCUPATION?

*By Nick Pollard, Sandra Schiller*

SF has been a vehicle for many scientists, philosophers, authors of literature and has a rich vein of writing about health issues, whether produced by authors with clinical backgrounds or else by others concerned with health topics. In occupational therapy, Wilcock (1999) set out the forward looking narrative of human occupation as doing, being and becoming and referred to this as 'science fiction.' She obviously subscribed to the idea that speculative fiction has the power of being thought provoking, or proving to be at some future point an identifiable moment where some key concept was first imagined, or its potential use first defined. Punk expresses an orientation towards counterculture, i.e. a culture that moves against the existing culture by being anti-capitalist, anti-consumerist or anti-establishment, for example. So which strictures of science or violations of planetary boundaries do the stories in this collection describe? And which emerging counterculture in pursuit of a more socially and ecologically responsible future healthcare can be glimpsed from them? Commenting on the collection, we would like to

focus on the following three key areas:

## STRANGE PROMISE

Often in SF scenarios the ordinariness of outlandish things is part of the 'gosh wow' effect. SF writer Thomas Disch (2000) suggested that SF had permeated and come to dominate the world, even if this never turned out to be the way it was originally imagined. As a genre, it has not been a reliable guide to the present, but the SF question 'what if...?' opens doors on the explorations of the possible, or even what may seem impossible, that may eventually become the shapers of our occupational performances and environments. For example, the mobile phone and its live chat functions were long familiar to viewers of Star Trek or Thunderbirds and Alexa's operation of the internet of things might be a benign and more limited reprise of Hal's initial nurturing functions in Arthur C Clarke's 2001 (1990 [1968]). Elon Musk's electronic neuralink, a USB socket interface with the brain (Kulshreshth, Anand, & Lakanpal, 2019; Musk, 2019),

which has potential for clinical benefits for a range of disorders and applications of telecare, is another well-established SF trope, the human computer interface (Schmitz, Endres, & Butz, 2010).

## TECHNOLOGY AND ETHICAL DILEMMAS

Developments at the present time foreshadow ethical dilemmas arising from technological advancements. Given the attractive medical and social care applications of technologies such as WeChat (e.g. Chen et al 2020; Wang, Zhang and Zeng, 2019), which are reportedly similar to Musk's projected phone apps, it would make perfect business logic to plug one Musk project into the other. The consequences for health outcomes would be immense, the avoidance of unhealthy behaviours, prevention made automatic, health and social care costs reduced and the need for so many staff done away with.

Technology and what it offers, especially where it offers clinical improvements can be very enticing, but there are transferable aspects of everything we develop which can open more doors than we might have imagined. On learning of Hiroshima, and reacting to this outcome from the application of his atomic theories, Einstein reportedly said 'If I had only known, I would have been a locksmith.' Someone else would have had the responsibility for making the chain of discoveries that led to the atom bomb instead, and who knows to what constraining and incarcerating purposes Einstein's

locks may have been put. The future is inevitable and almost anything you can imagine in it, someone can probably find a way to do, but that does not absolve clinicians tempted by technological benefits from the need to reflect, for example:

McCaffrey's *Ship Who Sang* (1972) might superficially suggest some possible outcomes for people with physical disabilities but was not imagined by an author with disabilities, and is an example of another trope in SF, the melding of technology with disability as a comforting and normalising vision (Schalk, 2020). An ethical technology might be worked around the strengths and assets of people with disabilities actively making decisions about their minds and bodies (Block et al 2016). The weakest link in the security of any technological system operation is the human element (Bhusal, 2021), and so it may also be said of medicine and bioethics (Koch, 2012).

Foucault's imprisoning panopticon penetrates to the device in our pockets, connects to the cameras in our front doors, the robot remote selectors in our entertainment hardware and silently witnesses all our interactions so as to absorb the algorithmic data from our occupations (Wood, 2016). Through telecare we can be Winston Smith's haranguing physiotherapist in Orwell's *Nineteen Eighty-Four* (1991/1948); we can forensically observe and divide social relations through the scientific Taylorism of the early Soviet era satirised in Zamyatin's *We* (1924/1993), which

the total coercive power of WeChat seems to be making everyday reality in China (e.g. Harwit, 2017; Tian, 2021). WeChat functions combined with the neuralink, if feasible, could epitomise biopower as a total tool of governmentality (Foucault 1990) within states if not, in corporate hands, the world.

The total nature of such power and ideology is set out in both Arendt's *The Human Condition* (2013 [1958]) and exultantly in Rand's *Atlas Shrugged* (2005 [1957]). Arendt revealed the logic of death inherent in totalitarianism – and where political processes, even in democracy, are reduced as a means to an end (Villa, 2018); Rand's vision of free market rational selfishness involves wholesale destruction of resources and the production of inequality to justify a free market utopia, something which many corporate leaders apparently seem to abide by (Shafer, Wang, & Hsieh, 2020). This is a well-established SF trope, explored by numerous authors – Pohl and Kornbluth's *the Space Merchants* (2003 [1953]), Adlard's *Tcity* trilogy (1971, 1972, 1975) while many more dystopian authors (e.g. Brunner, 1984 [1972], Disch, (2014 [1974]), and much of Octavia Butler, Philip K Dick and JG Ballard's works depict everyday life from the perspectives of hard pressed survivors.

## **(EN)COUNTERING ECOLOGICAL (IM)POSSIBILITIES**

While the growing threat of climate collapse in the form of floods and

gigantic fires dominates the news, SF today mainly works off the dystopian present. Looking for utopian counter-designs, however, shows that social-ecological utopias have led a rather meagre existence in science fiction. In the utopia-prone 1970s, Ernest Callenbach's international bestseller *Ecotopia* (1975) described Northern California, Washington and Oregon becoming independent of the USA in 1980 and establishing their own ecological and social society based on bioregionalism, the renunciation of "dirty" energy and car traffic. However, the book's voluntary segregation of white and black populations is alienating and was also sharply criticized at the time. In SF, sustainability in the use of planetary resources is not restricted to visions for life on Earth. Kim Stanley Robinson's *Mars Trilogy* (1992-96), for example, tells of a revolution on Mars in which the colonists declare themselves independent of Earth and move to a decentralized eco-socialist form of economy. The intensified interest in space travel (with a focus on economic resource extraction, science and armaments technology) that we have seen in recent years shows that the motive of emigration to other planets is still firmly a part of the popular scientific horizon of longing.

Do living planets exist? While science assumes that this is not the case, SF literature has followed what chemist, physician and physicist James Lovelock (1979) suggested in his Gaia hypothesis: If you look at the Earth and consider not only all the non-living matter it is made of but

also everything that is alive, then you can interpret it as a kind of “superorganism.” Through various feedback mechanisms living beings and their environment influence each other in such a way that the conditions for life remain optimal. Meanwhile, the “Medea hypothesis” presented by the paleontologist Peter Ward (2009) has by contrast stressed the enormously negative impact life can have on a planet, as demonstrated by the human activities leading to the climate crisis, for example.

## **SF COUNTERCULTURES IN HEALTHCARE?**

People have always told of their actions in the world through stories. The stories in this issue of Healthpunk are of a future in which humanity prevails over the strictures of science or at least the power over science, whether this takes the form of ecohealth systems of living well, e.g. through recognition of the importance of pelvic floor health or through the use of advanced technology to enhance human connectedness in a double-edged new era of empathy. The stories often make the point that in the future many difficult technical and ideological problems of intervention may be overcome. In the process, professional strictures on the transmission of specialist knowledge may be beneficially challenged by common sense, and the recognition of real needs and subjectivities, which may be a conceptual advantage of using exploration through engaging narrative. For example, the new centaurs of Canicross call into

question the established divide between human and animal healthcare, while the future body workers use established manual treatment techniques for a new goal, i.e. taking action against climate change as a psychosocial remedy. In some of the stories, humans have learned how to adapt to a hostile environment – by creating ancestral futures based on respect for demarcated lands and guaranteed life, or even by transcending the limitations of homo sapiens. In these scenarios, long-dominant thinking modes that emerged during the period of industrialization, such as the importance of time measurement, have lost their significance as drastically changed circumstances require a collective reorientation. Night swimming is a metaphor for such a kind of value orientation, where reciprocal acts of giving and receiving help lend purpose to future healthcare professionals. After all, in the face of the climate crisis, emotions may not necessarily be turned into light, but form the crucial basis for human connectedness. Humans are not in this alone, as “a collection of connections made stronger through each other” can also be observed in a stand of trees.



## REFERENCES

- Adlard, M. (1971). *Interface*. Sidgwick and Jackson.
- Adlard, M. (1972). *Volteface*. Sidgwick and Jackson.
- Adlard, M. (1975). *Multiface*. Sidgwick and Jackson.
- Arendt, H. (2013 [1958]). *The Human Condition*. The University of Chicago Press.
- Bhusal, C.S. (2021). Systematic Review on Social Engineering: Hacking by Manipulating Humans. *Journal of Information Security*, 12, 104-114, <https://doi.org/10.4236/jis.2021.121005>
- Block, P., Kasnitz, D., Nishida, A., & Pollard, N. (2016). Science (Fiction), Hope and Love: Conclusions. In P. Block, D. Kasnitz, A. Nishida & N. Pollard (Eds). *Occupying Disability: Critical Approaches to Community, Justice, and Decolonizing Disability*. Dordrecht. [https://doi.org/10.1007/978-94-017-9984-3\\_26](https://doi.org/10.1007/978-94-017-9984-3_26)
- Brunner, J (1984 [1972]). Arrow Books.
- Callenbach, E. (1990 [1975]). *Ecotopia: The Notebooks and Reports of William Weston*. Bantam.
- Chen, X., Zhou, X., Li, H., Li, J., & Jiang, H. (2020). The value of WeChat application in chronic diseases management in China. *Computer Methods and Programs in Biomedicine*, 196, 105710. <https://doi.org/10.1016/j.cmpb.2020.105710>
- Clark, A.C. (1990 [1968]). *2001: A Space Odyssey*. Orbit.
- Disch, T.M. (2014 [1974]). 334. Vintage.
- Disch, T.M. (2000). *The dreams our stuff is made of: How science fiction conquered the world*. Simon and Schuster.
- Foucault, M. (1990). *The history of sexuality: An introduction, volume I*. Trans. R Hurley. Vintage
- Harwit, E. (2017). WeChat: Social and political development of China's dominant messaging app. *Chinese Journal of Communication*, 10(3), 312-327. <https://doi.org/10.1080/17544750.2016.1213757>
- Koch, T. (2012). *Thieves of virtue: when bioethics stole medicine*. MIT Press.
- Kulshreshth, A., Anand, A., & Lakanpal, A. (2019, October). Neuralink - an Elon Musk start-up achieve symbiosis with artificial intelligence. In *2019 International Conference on Computing, Communication, and Intelligent Systems (ICCCIS)* (pp. 105-109). IEEE. doi: 10.1109/ICCCIS48478.2019.8974470
- Lovelock, J. (2000 [1979]). *Gaia: A New Look at Life on Earth*. Oxford Univ. Press.
- Musk, N.E. (2019). An Integrated Brain-Machine Interface Platform With Thousands of Channels. *Journal of Medical Internet Research*, 21(10) e16194, <https://doi.org/10.2196/16194>
- Orwell, G. (1991 [1948]). *Nineteen Eighty-Four*. Penguin.
- Pohl, F., & Kornbluth C.M. (2003 [1953]). *The Space Merchants*. Orion
- Rand, A. (2005 [1957]). *Atlas shrugged*. Penguin.
- Robinson, K. S. (2021 [1992]). *Red Mars: Book 1 of the Mars Trilogy*. Penguin Random House.
- Robinson, K. S. (2021 [1993]). *Green Mars: Book 2 of the Mars Trilogy*. Penguin Random House.

- Robinson, K. S. (2021 [1996]). *Blue Mars: Book 3 of the Mars Trilogy*. Penguin Random House.
- Schalk, S. (2020). Wounded Warriors of the Future Disability Hierarchy in Avatar and Source Code. *Journal of Literary & Cultural Disability Studies*, 14(4), 403-420.
- Schmitz, M., Endres, C., & Butz, A. (2010). A survey of human-computer interaction design in science fiction movies. In 2nd International Conference on INtelligent TEchnologies for interactive enterTAINment. <http://dx.doi.org/10.4108/ICST.INTETAIN2008.2476>
- Shafer, W. E., Wang, Z., & Hsieh, T. S. (2020). Support for economic inequality and tax evasion. *Sustainability*, 12(19), 8025.
- Tian, X. (2021, March). An interactional space of permanent observability: WeChat and reinforcing the power hierarchy in Chinese workplaces. *Sociological Forum* 36(1), 51-69.
- Villa, D. (2018). Totalitarianism, Tradition, and The Human Condition. *Arendt Studies*, 2, 61-71.
- Wang, G., Zhang, W., & Zeng, R. (2019). WeChat use intensity and social support: The moderating effect of motivators for WeChat use. *Computers in Human Behavior*, 91, 244-251.
- Ward, P. (2009). *The Medea Hypothesis: Is Life on Earth Ultimately Self-Destructive?* Princeton Univ. Press.
- Wilcock A.A. (1999), Reflections on doing, being and becoming. *Australian Occupational Therapy Journal*, 46, 1-11. <https://doi.org/10.1046/j.1440-1630.1999.00174.x>
- Wood, D. M. (2016). Beyond the panopticon? Foucault and surveillance studies. In J.W. Crampton & S. Elden (Eds.) *Space, Knowledge and Power: Foucault and Geography* (pp. 257-276). Routledge.
- Zamyatin, Y.I. (1993 [1924]). *We*. Translated by C. Brown. Penguin
- Brunner, J (1984 [1972]) London: Arrow Books
- Callenbach, E (1990 [1975]). *Ecotopia: The Notebooks and Reports of William Weston*. New York: Bantam.
- Chen, X., Zhou, X., Li, H., Li, J., & Jiang, H. (2020). The value of WeChat application in chronic diseases management in China. *Computer Methods and Programs in Biomedicine*, 196, 105710.
- Clark A.C. (1990 [1968]) 2001: *A Space Odyssey*. London: Orbit.
- Disch, T. M. (2014 [1974]) New York: Vintage.
- Disch, T. M. (2000). *The dreams our stuff is made of: How science fiction conquered the world*. New York: Simon and Schuster.
- Foucault, M. (1990). *The history of sexuality: An introduction, volume I*. Trans. Robert Hurley. New York: Vintage
- Harwit, E. (2017). WeChat: Social and political development of China's dominant messaging app. *Chinese Journal of Communication*, 10(3), 312-327.
- Koch, T. (2012). *Thieves of virtue: when bioethics stole medicine*. MIT Press.
- Kulshreshth, A., Anand, A., & Lakanpal, A. (2019, October). Neuralink-an Elon Musk start-up achieve symbiosis with artificial intelligence. In 2019 International Conference on Computing, Communication, and Intelligent Systems (ICCCIS) (pp. 105-109). IEEE.
- Lovelock, J. (2000 [1979]). *Gaia: A New Look at Life on Earth*. Oxford: Oxford Univ. Press.

- Musk, N.E. (2019). An Integrated Brain-Machine Interface Platform With Thousands of Channels. *Journal of Medical Internet Research*, 21(10).
- Orwell, G (1991 [1948]) *Nineteen Eighty-Four*. London: Penguin.
- Pohl, F. & Kornbluth CM (2003 [1953]) *The Space Merchants*. London: Orion
- Rand, A. (2005 [1957]). *Atlas shrugged*. London: Penguin.
- Robinson, K. S. (2021 [1992]). *Red Mars: Book 1 of the Mars Trilogy*. New York: Penguin Random House.
- Robinson, K. S. (2021 [1993]). *Green Mars: Book 2 of the Mars Trilogy*. New York: Penguin Random House.
- Robinson, K. S. (2021 [1996]). *Blue Mars: Book 3 of the Mars Trilogy*. New York: Penguin Random House.
- Schalk, S. (2020). Wounded Warriors of the Future Disability Hierarchy in Avatar and Source Code. *Journal of Literary & Cultural Disability Studies*, 14(4), 403-420.
- Schmitz, M., Endres, C., & Butz, A. (2010). A survey of human-computer interaction design in science fiction movies. In 2nd International Conference on INtelligent TEchnologies for interactive enterTAINment. <http://dx.doi.org/10.4108/ICST.INTETAIN2008.2476>
- Shafer, W. E., Wang, Z., & Hsieh, T. S. (2020). Support for economic inequality and tax evasion. *Sustainability*, 12(19), 8025.
- Tian, X. (2021, March). An interactional space of permanent observability: WeChat and reinforcing the power hierarchy in Chinese workplaces. In *Sociological Forum* (Vol. 36, No. 1, pp. 51-69).
- Villa, D. (2018). Totalitarianism, Tradition, and The Human Condition. *Arendt studies*, 2, 61-71.
- Wang, G., Zhang, W., & Zeng, R. (2019). WeChat use intensity and social support: The moderating effect of motivators for WeChat use. *Computers in Human Behavior*, 91, 244-251.
- Ward, P. (2009). *The Medea Hypothesis: Is Life on Earth Ultimately Self-Destructive?* Princeton, Oxford: Princeton Univ. Press.
- Wilcock A.A. (1999) Reflections on doing, being and becoming. *Australian Occupational Therapy Journal*, 46, 1-11.
- Wood, D. M. (2016). Beyond the panopticon? Foucault and surveillance studies. In JW Crampton & S Elden (eds.) *Space, Knowledge and Power: Foucault and Geography* (pp. 257-276). Abingdon: Routledge.
- Zamyatin, Y.I. (1993 [1924]) *We*. Translated by Clarence Brown. London: Penguin

---

**Nick Pollard**<sup>1</sup>

<https://orcid.org/0000-0003-1995-6902>

**Sandra Schiller**<sup>2</sup>

<https://orcid.org/0000-0001-5970-6831>

<sup>1</sup>College of Health and Wellbeing Sciences, Sheffield Hallam University, UK

<sup>2</sup>Faculty of Social Work and Health, HAWK University of Applied Sciences and Arts, Hildesheim, Germany

*Contact:*

[n.pollard@shu.ac.uk](mailto:n.pollard@shu.ac.uk)

[sandra.schiller@hawk.de](mailto:sandra.schiller@hawk.de)

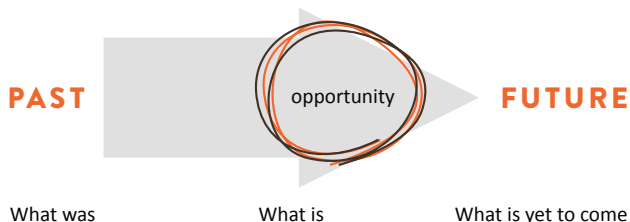
---

# EMBRACING THE UNKNOWN

*By Kristen Abrahams, Rita Macamba*

In our world today, the challenges we face are complex. Societies are not equal. Race, gender, poverty and socioeconomic status impact health and health care. Historical and political factors intertwine with the social, economic and ecological. Privilege, marginalisation and inequity permeate the systems that shape our daily realities.

At times, the current reality makes us feel helpless – a sense of not knowing what to do. The complexity is paralysing. As we engage with understanding these contextual realities, we can see the need for something to be done but there is an ominous cloud hanging over us. We feel overwhelmed with the magnitude of the challenge. Not knowing where to start.



With increased calls for social justice around the world, there is a pressing need to create a more fair and just society.

Healthpunk volume 2 offers a unique opportunity to think about new

futures – ones that are not constrained by the tensions of the present. Imagining new futures is intriguing because it challenges us to think beyond our current reality.

The future is something that is yet to be determined. The beauty of such liminal spaces is that it allows us to dwell between what is and what is yet to come.

The stories in the volume draw on the realities of the present but allow us to transition into a future which is yet to be written – a space of uncertainty.

Sitting with the uncertainty of the future and dwelling with liminality, challenges us to hold only loosely onto our assumptions and ideas of the world – allowing them to be shaped and reshaped. It encourages us to embrace a clear mind – one that is open to something different.

Engaging in liminal space and time also provides the opportunity for innovation and creativity. Imagining the future offers us endless possibilities for a new and different world – one that is more socially and ecologically responsive. The contributions to Healthpunk volume 2 challenge us to think beyond our present, outside of the boundaries of



our comfort zones – to imagine a world full of innovation and enterprise.

We are inspired by the stories from people, from varying backgrounds, disciplines, and locations. We appreciate and value the diversity of the voices – an essential part of new futures.

The stories provide us with the impetus to dream and reflect on our own experiences in order to create a better future. Most importantly, in the depths of our current social, ecological and health crises, the stories in Healthpunk provide us with a sense of hope for a brighter future.

---

**Kristen Abrahams<sup>1</sup>**

<https://orcid.org/0000-0002-6885-0162>

**Rita Macamba<sup>1</sup>**

<sup>1</sup>University of Cape Town, South Africa

*Contact:*

[kristen.abrahams@uct.ac.za](mailto:kristen.abrahams@uct.ac.za)

[ritagoqwana@gmail.com](mailto:ritagoqwana@gmail.com)

---



# Editorials



# ALS PHYSIOTHERAPIE NOCH IN DER PRAXIS STATTFAND: WIE UMWELT UND SOZIALES NACHHALTIG DIE PHYSIOTHERAPIE VERÄNDERT HABEN

*By Filip Maric*

Es war einmal eine Zeit als Physiotherapie noch in der Praxis stattfand.

In den 100 bis 200 Jahren, in denen das der Fall war, glaubten wir, fast wie besessen, dass Gesundheit, Krankheit und Genesung nur im Körper zu finden wären und nur da passieren sollten. Naja, außer vielleicht noch in unseren Praxen eben.

Sicher, für eine ganze Weile konnte man das noch dem historischen Würgegriff der Aufklärung zuschulden schieben. Nicht ganz unbedeutend waren ja die Dominanz des Positivismus und seiner ‚wissenschaftlichen Methode‘ die uns glauben ließen die Welt könnte, nein, MÜSSTE, in selbstgewählte Einzelteile zerlegt werden die dann auf dem Seziertisch der Wissenschaft unter die Lupe, und in der Medizin eben unters Skalpell genommen werden konnten, um aus Ihnen auch das letzte bisschen objektive Fakten aus den Fasern zu schneiden. Dann

einfach die vermeintlich kaputten Teile rausnehmen, und mit richtigeren oder besser noch – normalen – Teilen austauschen und ‚Voilà!‘, evidenzbasierte Physiotherapie und Rehabilitation. Endlich funktioniert alles wieder, wie es soll. Bloß nicht aus der Reihe tanzen, bloß nichts Abnormales, geschweige denn Krankes, nur keine BeHindernisse auf dem aufgeklärten Eroberungszug durch Welt, Raum und Geschichte.

Wenn die anfänglich sinnvolle Unterordnung unter Positivismus und Medizin zumindest zu dieser Zeit, also als Physiotherapie noch in der Praxis stattfand, sowohl Schutz als auch Entschuldigung geboten hatte, so waren diese Gemütslichkeiten für eine akademisierte, will sagen, emanzipierte... oder nein... sagen wir doch einfach erwachsene Physiotherapie natürlich nicht mehr zu genießen. Wie auch. Wenn man erstmal seinen Blick zur Welt geöffnet hat, wird es ja geradezu schmerzhaft, um nicht zu erwähnen

auch eher unvertretbar, es sich weiter ausschließlich in den ach-so-gewohnten vier Wänden von Praxis, Kittel, Krafttraining und Körper gemütlich zu machen. Gut gehütet im nicht-so-guten-GeWissen das die nächste Verletzung, der nächste Herzkreislaufschaden, die nächste Pandemie, doch den stetigen Strom von Patient\_innen durch die Tür weiterfließen lassen wird. Zumindest so lange wie Vater Staat vor gewohnter Trägheit eben unsere Gewohnheiten unterstützt.

Wenn aber eine Sache ganz schnell deutlich wurde, dann war es, dass draußen in der Welt erwachsen sein, eben nicht „im Regen stehen“ bedeutet, und schon gar nicht allein. Immerhin hatten zum Beispiel Jahrzehnte von Forschung und Entwicklung in den Sozial- und Humanwissenschaften schon aber-tausende von Richtungen für anderweitige Gesundheitsforschung, Lehre und Praxis eröffnet. Hätten wir sie neue Felder genannt, so waren sie von zum Pflücken reifen Früchten überwuchert die nicht nur sättigend für die Anwendung bereit-standen, sondern auch Düngemittel für Neues darstellten. Fürs, ganz physiotherapeutisch, „in die Hand nehmen“ und zum Wohle der Gesundheit mobilisieren.

Phänomenologische und hermen-eutische Forschung und die Ihnen zugrundeliegende Kritik des Positivismus zum Beispiel schafften den endlich überfälligen Raum für die Wertschätzung der gelebten Erfahrung der Menschen. Im Nachhinein scheint es doch lachhaft offensichtlich, dass was Menschen

erleben, d.h. wie Menschen leben und Leiden erfahren, eine mindestens gleichbedeutende Rolle in Gesundheit und Genesung spielen sollte wie deren von Ärzten, Physiotherapeuten und dergleichen schmerzhaft exponierten Gewebe. Zugegeben, die Art wie sich Personenzentrierung und die dankbarerweise eher kurze, aber doch heftige BPS-Pandemie sich an dieser netten, aber auch sehr limitierten Einsicht gemästet hatten, war vielleicht nicht ganz ideal. Aber gut, ein notwendiger Schritt vielleicht um dann ganz schnell das darin versteckte Vergessen der Gesellschaft, oder anders, den impliziten Missbrauch des Wortes ‚sozial‘ im bio-psycho-nicht-so-sozialen-Modell hinter sich zu lassen.

Auch hier standen dann glück-licherweise wieder Jahrzehnte sozialwissenschaftlicher und sozial-kritischer Forschung richtungs-korrigierend zur Hilfe bereit. Im Tandem mit bevölkerungsgesund-heitlichen Einsichten wurde uns hier ganz schnell klar, dass soziale Strukturen, theoretischer wie praktischer Art, viel grundlegendere Auswirkungen auf die Gesundheit Einzelner haben als jegliche Individuen-orientierte Gesundheits-maßnahme das jemals könnte. Sich mit Ausbildung, sozioökonomischem Status, Verteilungsgerechtigkeit, Be-hausung und ähnlichem zu beschäftigen, stellte dabei nur den symptomatischen Anfang zur viel ursächlicheren Behandlung der da-runterliegenden Geringschätzung alles anderen, die sich historisch so oft durch Fremdenhass, Sklaverei,

Kolonialismus, Völkermord, Imperium, Kapitalismus, Industrialismus und deren zahlreichen Verwandten ausgedrückt hatte.

Wenn die logische Konsequenz der soziologischen und sozialkritischen Analyse der Physiotherapie (also Berührung, Bewegung, und andere physikalische Therapien) wieder als Gemeingut an die Menschen zurückzugeben, erstmal große Empörung ausgelöst hatte, war sie doch im Nachhinein genauso lächerlich einleuchtend, wie die vorherige Einsicht um die Wichtigkeit persönlichen Erlebens. Ganz kurz an einem Beispiel zusammengefasst: Da gleicher Zugang zu Gesundheit uns im Zuge der damaligen health equity (Gesundheitsgerechtigkeit) Welle ein echtes Anliegen waren und Kapitalismus ein essenzieller Treiber von ungerechter Gesundheitsverteilung war, konnten wir ja gar nicht anders als das Missverständnis aufzugeben, dass es bei health equity darum ginge, dass jede\_r Zugang zu uns kriegt und es somit um die Stärkung und Erhaltung unseres Berufsstandes in seiner alten Form ginge. Gesundheit und Gesundheitsfürsorge in diesem Sinne dem Kapital zu entziehen und den Menschen zurückzugeben war also nur eine einfache Aufwärmübung. Deren wirkliche Stärke für uns und Ihr Doppelwert für die Gesundheit aller lag darin, Energien für Neues freizumachen. Für andere physiotherapeutische Strukturen, Aktivitäten und eine ganz andere Form der Teilhabe in und an der Welt. Nicht länger als ausführendes Organ exekutiv am Einzelpatient\_innen in

der Praxis, sondern eben ganz und gar im Zeichen der Physiotherapie, in bester Gesellschaft gesellschafts- und systembewegend.

Hier draußen in der Welt ließ sich Krafttraining plötzlich und wie ein frischer Wind anders denken und anders betreiben: als Bestärkung der machtlosen und Bestärkung der Gerechtigkeit unter immer neuen Herausforderungen und Sonderfällen, die eine Bedrohung oder Beeinträchtigung von Gesundheit und Wohlbefinden der Menschen darstellen. Auch die Richtigkeit des ‚Stretchings‘ wurde endlich nicht mehr in dem langweiligen alten Sinne und der tausendsten Studie zur Hamstring-Flexibilität diskutiert, sondern konnte überall da therapeutische Kernmaßnahme werden, wo rigide Ansichten und Gesellschaftsstrukturen Bewegung, Teilhabe und Wohlbefinden limitieren. So wurden dann auch Gelenke Schlüsselstellen der gesellschaftlichen Beweglichkeit, die es mindestens genauso regelmäßig zu mobilisieren gilt, wie ihren exklusiv anatomischen Namensvettern, nicht zuletzt, weil sie mindestens genauso von Arthrose und Versteifung gefährdet sind.

Hätte man nicht aufgepasst, hätte man gedacht es wäre überraschend, wie schnell sich auch unsere eigene gedankliche und handlungsbezogene Flexibilität in den jungen Jahren des 21sten Jahrhunderts erhöht hatte. Aber was ist schon Überraschendes an einer Wundfläche von tausenden und hunderten von Jahren von Zerstörung und Unterdrückung, in die man immer wieder und mit den



verschiedensten diagnostischen und bildgebenden Mitteln den Finger steckt. Irgendwann wird es eben Zeit, therapeutisch einzugreifen und genau das ist das Diktum der Gesundheitsfürsorge. Kein überraschtes also, sondern eher ein lange überfälliges ‚na endlich‘ Seufzen kam aus uns als in eben diesen jungen Jahren des 21sten Jahrhunderts. Auch wir selbst, also der globale Norden musste endlich einsehen, dass wir weder in einer von uns gemachten noch von uns kontrollierten oder kontrollierbaren Welt leben.

Postmoderne Philosophien spiegelten hier, im Lichte von Klimawandel, rapidem Verlust von Biodiversität und globaler Zerstörung von Ökosystemen, die deutlichste Alltagseinsicht von allen: Das wir und unsere Leben mit deutlich mehr und größeren Kräften verwoben sind, im Umgang mit denen auch die letzte Kniebeuge nichts zu bedeuten hat. Ob wir nun aus der Praxis raus und uns mit Sozialem befassen wollten oder nicht, drängte uns also die Umwelt und deren, zumindest für Menschen und viele andere koexistierende Lebensformen, globale Zerfall letztlich die Welt auf die Therapiebänke und verlangte Stellungnahme und Behandlung. Keine Terminverschiebung mehr aufgrund langer Wartelisten, mangelndem Platz im Curriculum, oder personen- und körperzentrierter Limitierung unseres Zuständigkeitsbereiches.

Kein Wunder also, dass Umweltphysiotherapie, planetare Gesundheit und deren ver-

schiedenste Vettern weltweit, wie Pilze aus dem Boden schossen. Naja, über einen Zeitraum von 50 Jahren zumindest in dem Ärzt\_innen und leider besonders Physiotherapeut\_innen mal wieder eher Schlussleuchten als Vorreiter waren. Aber gut, vielleicht war es, gerade weil gut Ding Weile haben will, so leicht auch hier gleich tatenkräftig in die notwendigen Änderungsprozesse einzusteigen. Im Namen Physiotherapie schlummerte es ja schon seit unseren Anfängen und für Etymologen vielleicht ganz offensichtlich, die Physiotherapie als Dienst für die Natur, oder genauer, als Fürsorge für alles, was ist.

Die rein grüne Umstellung von Praxen und Gesundheitssystemen im Sinne von verringertem Missbrauch sozialer und natürlicher Ressourcen war da ein leichter nächster Schritt der, zumindest im Falle der mittlerweile als Gemeingut umverteilten physikalischen Therapien und in die Welt gesetzter Handlungsfelder, eigentlich kaum noch nötig war. Auch das ökonomischer Wachstum und dadurch definierte Arbeit und Entwicklung nicht im Zentrum der 16 Ziele für Menschen und Welt sein konnten war ein leichtes, in offensichtlicher Anbetracht dessen, wie besagter Kapitalismus und die ihm zugrundeliegende Ausbeutung von Menschen und Natur die Treiber unserer Umwelt- und Sozialkrisen waren. Es war also nicht die, im arroganten Fortschrittsdenken des globalen Nordens verankerte, Entwicklung die Nachhaltigkeit zu sein hatte, oder, um es mal ganz unverblümt zu sagen: nicht

Entwicklung via ökonomischem Wachstum die es bei uns zu erhalten galt, sondern eine den stetigen Wandel der Welt begleitende öko-soziale Transformation, Veränderung, Veränderlichkeit, Bewegung und Beweglichkeit. Das Herzstück der Physiotherapie eben.

Auch hier war also unsere steigende Expertise im 'Gesellschaft uns System bewegen' in jeglicher Hinsicht gebraucht. Die sozialen Ursachen unserer sozio-ökologischen Krisen brauchten ja auch Behandlung auf genau dieser tiefen, fast faszial verwobenen Ebene. Aber Klimawandel, Post-humanismus, indigene Weltansichten und ähnliches zeigten uns eben, dass wir auch noch unser Verständnis des sozialen, von Gesellschaft, und in diesem Sinne auch Gesundheitsfürsorge um das mehr-als-menschliche erweitern mussten. Dass soziale Ursachen behandeln auch bedeutet, unsere vermeintliche Hoheit über alles andere sowohl ideologisch als auch praktisch aufzugeben.

Wir mussten nicht nur verstehen, dass Gesundheit grundlegend durch soziales, sondern eben auch durch Umwelt bedingt ist, die wiederum eine Unzahl von mehr-als-menschlichen Formen der Existenz miteinbegreift. In anderen Worten: unsere Gesundheit war nie nur unsere und nie durch uns Menschen geschaffen, sondern primär durch die Welt und abertausende von kleinen und großen Helfern aller Art. Man nehme nur zum Beispiel Jahrmillionen von Sonnenlicht verdauenden Cyanobakterien, die nach und nach den Sauerstoffgehalt in der Erdatmosphäre so hoch-

getrieben hatten, sodass überhaupt erst mehrzelliges Leben und Atmen möglich wurden. Dementsprechend war also auch Genesung nie nur menschliche Leistung, sondern in voller Abhängigkeit von einer komplexen Vielfalt an mehr-als-menschlichem zu denken mit dem wir untrennbar verwoben sind.

Nur gut, dass uns unsere netten Kolleg\_innen, die neuen Umwelt-zahnärzt\_innen, uns in einer Nacht- und Nebel-OP umgehend auch noch den letzten Self-management-Milchzahn ziehen konnten, um den notwendigen Platz für ein ökologischeres und solidarischeres Verständnis von Gesundheit und Gesundheitsfürsorge zu schaffen. Der Gedanke, dass irgendwer auf dieser Welt auch nur irgendetwas selbst macht, geschweige denn managen kann fühlt sich heute endlich so fremd an. Ich wünsche mir diese Zeit auch gar nicht zurück, weil ich unsere heutige Solidarität und das ökologisch verstärkte mit- und füreinander einfach viel zu sehr schätze und genieße. Schon meine damals älter werdende und allein-stehende Mutter mochte das so sehr. Das man nicht ständig heldenhaft eisern sein muss, alles selbst und alleine, sondern immer mehr gegenseitige Unterstützung, mehr Fürsorge, und mehr Miteinander unter uns ist.

Einige der Schritte zu unserer sozio-ökologischeren Orientierung gingen für uns Physiotherapeut\_innen auch durch die Weichen der öffentlichen Verkehrsmittel und der aktiven Fortbewegung. Die 'Fahrräder und Fahrradwege für alle' Kampagne ja war innerhalb eines Jahres schon

umgesetzt. Nicht zuletzt durch die Einstellung von Physiotherapeut\_innen in jedes einzelne Städteplanungsteam der Welt. Das ist jetzt Standard und kam auch vielleicht gerade zur rechten Zeit. Aber eben nicht, weil wir einfach mehr körperliche Aktivität durch aktive Transportmittel gebraucht hatten, sondern weil Städteplanung gar keine architektonische Frage mehr ist, sondern eine der Beweglichkeit. Fortschreitende geologische und marine Veränderungen stellten eine klare Forderung für ein neues, nomadisches Denken des Zusammenseins in einer Welt, die grundlegend von menschlicher und mehr-als-menschlicher Migration geprägt ist, von den Bergen unter uns, über die Luft und Meere um uns, bis zu den Tieren in und mit uns.

Vor dieser Zeit klang es noch verrückt, dass eine Physiotherapeutin Fledermäuse rehabilitiert hat, weil sie sie faszinierend fand und deren menschengeschuldetes Leiden nicht ertragen mochte, aber eben auch weil Fledermäuse Superstars der Bestäubung und somit der Biodiversität sind. Heute ist Biodiversitätsrehabilitation in der Physiotherapie schon nichts Besonderes mehr, nachdem wir auch die Behandlung von Tieren und Mensch-Tier-Beziehungen wieder als Kernteil unserer Arbeit reintegriert haben. Therapiehund, Pferde, Kühe, Katzen, Wombats, Capybaras und Kamele. Die Frage ist nicht unberechtigt: Wer ist hier jetzt eigentlich wirklich die Therapeutin, die für Gesundheit und Genesung auf der Welt sorgt. Wir oder sie?

Naja, der springende Punkt ist doch vielleicht dass wir jetzt gemeinsam an einem Strang ziehen und an der Rehabilitation von Ökosystemen arbeiten. Und kein passenderer Anfang dafür als damals zwischen 2021 und 2030, in der UN-Dekade der Ecosystems Restoration. Ich weiß noch, wie seltsam ich es damals fand als ich das erste Mal auf eine Forschungsexpedition in die Arktis eingeladen war um über den Zusammenhang zwischen Gesundheit, sozialem und der arktischen Tiefsee mit all Ihren wunderbaren geologischen Eigenheiten und Lebensformen zu forschen. Und als es dann klar wurde, dass es bei der Hydrotherapie ja gar nicht immer notwendigerweise nur um uns gehen muss sondern auch das Leben im Wasser und sogar um das Wasser selbst.

Der springende Punkt war aber vielleicht gar nicht was uns in all diesen, vermeintlich wilden Anfängen für Ideen und Forschungsergebnisse kamen, sondern dass diese Anfänge es normalisiert haben das Physiotherapie endlich, ihrem Namen gerecht, Naturtherapie wird; dass es normal wurde, dass auf den Inseln des Mittelmeeres lebende Physiotherapeut\_innen geholfen haben, das Mittelmeer von der erdrückenden Plastikverschmutzung zu befreien und einheimische Schafhirten-Traditionen wiederbelebten um umweltfreundlichere Beschäftigung und Bekleidung für lokale Einwohnende zu schaffen; dass es völlig normal wurde das man als Physiotherapeut\_in nicht nur mit Kolleg\_innen aus anderen Gesundheitsberufen, sondern eben

auch Hand-in-Hand mit Kolleg\_innen gänzlich anderer Arten zusammenarbeitet um der Komplexität von Gesundheit, Glück, und Wohlbefinden gerecht zu werden.

Als Physiotherapie noch in der Praxis stattfand, schien alles das noch total unmöglich. Was rede ich. Es klang komplett verrückt. Wenn uns damals jemand eine gar nicht so fiktive Geschichte davon erzählt hätte, möglicherweise sogar noch auf einem Forschungssymposium einer Gesellschaft für Physiotherapiewissenschaft, hätten wir gleich einen Psychiater zu Hilfe gerufen und den armen Kerl abtransportiert, auf das er nie wieder publizieren möge. Die Physiotherapie sozial- und umweltorientiert umzugestalten war aber eben doch weder verrückt noch unmöglich, noch eine Qual oder sogar Verlust, sondern selbst inmitten immenser Krisen erfrischend, motivierend und ein Umbruch voller Energie mit den bedeutungsvollsten Gewinnen für Gesundheit und Wohlbefinden.

Aber wem erzähle ich das. Wir sitzen hier ja auf genauso einem Sym-

posium und wissen all das schon. Wir waren ja dabei und haben es selbst mitgemacht. Es hat ja auch nicht viel gebraucht: Den Willen wenigstens einen kleinen Anfang zu machen wo auch immer wir gerade stehen; eine wie von selbst und exponentiell steigende Zahl von Leuten die verschiedenste Anfänge dann auch gewagt haben; und vielleicht eben auch ein paar scheinbar phantastische Geschichten in denen wir den Raum und die Kreativität fanden unseren Wünschen und Hoffnungen für Welt, Gesundheit und Gesellschaft Ausdruck zu geben, um sie dann Wirklichkeit werden zu lassen. Es gibt natürlich immer noch viel zu tun und wir haben uns noch vieles, vermeintlich verrücktes vorzustellen, keine Frage, an Beschäftigung wird es uns nicht mangeln. Aber es ist schon toll zurückzuschauen, und zu sehen, was plötzlich alles möglich wurde als die Physiotherapie endlich mal aus der Praxis rauskam. Und das war gerade mal der Anfang. Denn wir können und werden noch viel mehr leisten als wir es damals durften und zu träumen gewagt haben.



## EPILOG

Dieser Text ist die Mitschrift einer Keynote die auf dem 6. Forschungssymposium der Deutschen Gesellschaft für Physiotherapie-wissenschaft (DGPTW) vom 31. September bis 1. Oktober 2022 gehalten wurde. Er ist, in vielen Teilen, mehr Inspirationen zu verdanken als ich in einem kurzen Absatz erwähnen kann. Neben praktisch jedem einzelnen Mitglied der Environmental Physiotherapy Association gehören dazu einige besonders offensichtliche: David Nicholls und seine Arbeit zu Physiotherapy Otherwise; Berta Paz Lourido und Martina Borg, die beide auf ihrer jeweiligen Insel im Mittelmeer leben; Sarah Elizabeth Curran, die wilde Physiotherapeutin und ihre Fledermäuse; Sara Pedersen und Asgeir Andreassen Bergli, zwei (von vielen) Physiotherapie-studenten die mir während ihres Forschungsprojekts ihr Vertrauen schenkten; Giuliana Panieri, weltbegeisterte Arktisforscherin und Professorin für Geologie; und so viele mehr.

Als ich mit dem Schreiben dieser Keynote fertig war, stieß ich auf dieses neuere Zitat von Judith Butler, ebenfalls durch David Nicholls' Physiotherapy Otherwise: "Manchmal muss man sich auf eine radikale Weise etwas vorstellen, die einen ein wenig verrückt erscheinen lässt, die einen in ein peinliches Licht rückt, um eine Möglichkeit zu eröffnen, die andere in ihrem wissenden Realismus bereits verschlossen haben". Einen Moment lang dachte ich die Keynote mit einer Folie mit diesem Zitat abzuschließen, musste dann aber enttäuscht feststellen, dass es eigentlich nicht auf die Keynote zutrifft. Dies, weil meine ganze Geschichte gefühlt nur etwa 10 % Fiktion enthält, da jeder Punkt und jedes Beispiel, das sie anspricht, entweder bereits gedacht oder getan wurde oder zum jetzigen Zeitpunkt auf die eine oder andere Weise in Arbeit ist. Die Folie, die ich am Anfang verwendet hatte, hingegen: "Das Folgende basiert auf einer wahren Geschichte", entspricht viel eher der Geschichte dieser Keynote. Und seltsamerweise hat dies einen süß-sauren Beigeschmack, denn es bestätigt, zum Einen, wie schwierig es ist, etwas zu denken, was wir noch nicht getan oder gedacht haben; aber zum Anderen auch, weil bereits so viel Gutes und radikal Anderes passiert, dass einen winzigen Funken Hoffnung leuchten lässt der uns vorwärts drängt und bestätigt, dass Umwelt und Soziales die planetare Gesundheit/-sfürsorge tatsächlich nachhaltig verändern.



# WHEN PHYSIOTHERAPY STILL HAPPENED IN THE CLINIC: HOW SOCIETY AND ENVIRONMENT CHANGED PHYSIOTHERAPY FOR GOOD

*By Filip Maric*

Once there was a time when physiotherapy still happened in the clinic.

During the 100 to 200 years that this was the case, we believed, almost obsessively, that health, illness, and recovery could only be found in the body and should only happen there. Well, except in our clinics maybe.

Sure, for quite a while it was still possible to blame the historical stranglehold of the Enlightenment for this. Not entirely insignificant was the dominance of positivism and its 'scientific method,' which made us believe that the world could, no, should, be dissected into arbitrarily chosen individual parts that could then be put under the magnifying glass, and the dissecting table and scalpel of science and medicine, to cut even the last bits of objective facts out of their fibres. Then, simply take out the supposedly broken parts and replace them with 'healthy' or better yet - normal - parts and 'Voila!': evidence-based physiotherapy and rehabilitation. At last, everything works as it should. Just so long as nothing steps out of line, nothing abnormal, let alone sick, no

disablement of the enlightened conquest of world, space, and history.

If the initially understandable subordination to positivism and medicine had offered both protection and excuse, at least at that time when physiotherapy still took place in the clinic, we could no longer enjoy these comforts as an academic field, or let's say emancipated... or actually.... let's just say grown-up physiotherapy. And how could they be. Once one has opened one's eyes to the world, it becomes downright painful, not to mention unjustifiable, to continue to make oneself comfortable exclusively within the oh-so-familiar four walls of our clinics, gowns, strength training, and body. Well-guarded in the not-so-good conscience that the next injury, the next cardiovascular problem, the next pandemic, war, or similar disaster, will keep a steady stream of patients flowing through our doors. At least so long as 'Father State' continues to support our habits out of its own habitual inertia.

But if one thing became clear very quickly, it was that being an adult out in the world does not mean standing

in the rain, and certainly not alone. After all, and just as an example, decades of research and development in the social and human sciences had already opened thousands of directions for otherwise health research, teaching, and practice. If we had called them new fields, we would have recognized them as overgrown with fruit ripe for picking that was not only rich for immediate application, but also as fertiliser for the new; for, physiotherapeutically speaking, being mobilised for the benefit of health.

Phenomenological and hermeneutic research and their underlying critique of positivism, for example, created the long overdue space for the appreciation of people's lived experience. In retrospect, it seems laughably obvious that what people experience – how people live and experience suffering – should play at least as significant a role in health and recovery as the tissues so painfully exposed by doctors, physiotherapists, and the likes. Ok, admittedly, the way person-centredness and the thankfully rather brief but nevertheless fierce biopsychosocial-model-pandemic had feasted on this comforting, but also very limited insight, was perhaps not entirely ideal. But perhaps this was a necessary step to quickly leave behind the hidden neglect of 'society' and its implicit misuse in the biopsychosocial model.

Fortunately, here as well, decades of social science and socio-critical research were readily available to help us course-correct. In tandem with population health insights, we

quickly realised that social structures, both theoretical and practical, have a much more fundamental impact on the health of individuals than any individually oriented health measure ever could. Addressing education, socio-economic status, justice and equity, housing, and similar issues were only the symptomatic beginning to the much more causal treatment of that underlying fear and contempt of the Other that had, historically, so often expressed itself through xenophobia, slavery, colonialism, genocide, empire, capitalism, industrialism, and their many relatives.

If the logical consequence of the sociological and socio-critical analysis of physiotherapy, that is, to return touch, movement, and other physical therapies to the people as a common good, initially caused great indignation, in retrospect it was only just as ridiculously plausible as the previous insight about the importance of personal experience. To summarise very briefly with an example: since equal access to health was a real concern for us during the 'health equity wave' of the time, and capitalism was an essential driver of inequitable health distribution, we couldn't help but abandon the misconception that health equity was about everyone getting access to us, and thus, about strengthening and preserving our profession in its old form. So, taking health and healthcare away from capital and giving it back to the people was just another warming-up exercise for the changes to come. Its real strength for us and its double value for everyone's health lay in freeing up energies for

something entirely new. For other physiotherapeutic structures, activities, and a completely different form of participation in and on the world. No longer merely executing techniques on individual patients in the practice, but entirely within the purview of physiotherapy, moving systems and societies in this newly gained community.

Out here in the world, strength training could suddenly, and like a breath of fresh air, be thought and practised differently: as empowerment of the made-powerless and empowerment of justice under ever new challenges and special cases that pose a threat to people's health and well-being. The rightness of 'stretching' was finally no longer discussed in the boring, old sense of the thousandth study on hamstring flexibility but could become a core therapeutic measure wherever rigid views and societal structures limit movement, participation, and well-being. Joints became reconceptualised as switch points of social mobility that need to be mobilised at least as regularly as their exclusively anatomical namesakes, not least because they are at least as much at risk of rigidity and ossification.

Had you not been paying attention you would have thought it surprising how quickly our own flexibility of thought and action had increased in the early years of the 21st century. But what is surprising about an open wound of thousands and hundreds of years of destruction and oppression, into which you stick your finger again and again with the most diverse diagnostic and imaging means just to

reconfirm its persistence. At some point it is time to intervene, therapeutically. And the dictum of health care is precisely that after all. So, it wasn't a surprised sigh, but rather a long overdue 'at last' that came from us when we in the global North finally had to realise that we neither live in a world made by us, nor a world controlled, or con-trollable, by us.

Here, and in the scorching light of climate change, the sixth mass extinction and global destruction of ecosystems, postmodern and resonant philosophies reflected the most mundane insight of all: That we and our lives are interwoven with significantly more and greater forces in the face of which even the last barbell squat means nothing. So, whether we wanted to get out of our clinics and deal with questions of the social or not, the environment and its global disintegration ultimately pushed the world onto our treatment tables and demanded that we take a stand, demanded treatment. No more postponing appointments due to long waiting lists, lack of space in the curriculum, or person- and body-centred limitations of our scope of practice and responsibility.

No surprise then that environmental physiotherapy, planetary health and their various cousins mushroomed all over the world. Well, over a period of 50 years anyway, during which doctors and, unfortunately, especially physiotherapists were once again taillights rather than pioneers. But ok, perhaps it was because good things take time that it was so easy for us to enter head-first into the

necessary changes right away. It had been dormant in the name physiotherapy since our very beginnings after all, and quite obviously so for etymologists: physiotherapy as a service for nature, as care for everything that is.

The purely green transformation of practices and health systems in terms of reduced exploitation of social and natural resources was an easy next step that was suddenly hardly necessary anymore, given that the physical therapies had now been redistributed as common goods, and our fields of engagement moved out into the world. That economic growth, and work and development as defined by it, could not be at the centre of the 16 goals for people and planet was an equally easy adjustment, given how said capitalism and its underlying modes of exploitation were driving our environmental and social crises. To this tune, it was not development, anchored in the arrogant, global northern belief in progress that had to be sustained, or, to put it bluntly, not development via economic growth that we had to sustain, but an eco-social transformation, change, movement, and mobility that could accompany the constant change of the world. The very heart of physiotherapy.

Here, too, our growing expertise in moving systems and societies was needed in every respect. After all, the social causes of our socio-ecological crises needed treatment at precisely this deep, almost fascially interwoven level. But climate change, post-humanism, Indigenous worldviews,

and similar issues showed us that we also needed to expand our understanding of the social, of society, and in this sense also of health and care to include the more-than-human; that treating social causes also means giving up our supposed sovereignty over everything else, both ideologically and practically.

We not only had to understand that health is fundamentally determined by the social, but also by the environment, which in turn involves a myriad of more- and other-than-human forms of existence. We had to recognize that our health was never only ours and never created by us humans alone but, primarily, by the world and thousands over thousands of small and large helpers of all kinds. Take, for example, millions of years of sunlight-digesting cyanobacteria that gradually increased the oxygen content of the Earth's atmosphere to such an extent that multicellular life and breathing became possible in the first place. Accordingly, recovery was never just a human achievement, but had to be thought of in terms of full dependence on a complex variety of more-than-human existences with which we are inseparably interwoven.

It's just as well that our friendly colleagues, the newly reoriented environmental dentists, were able to pull even our last 'self-management milk tooth' in a night-and-fog operation, all to create the necessary space for a more ecological and solidarity-oriented understanding of health and care. The idea that anyone in this world can do anything themselves, let alone manage it by



oneself, feels so alien today. I don't wish that time back for a minute. I appreciate and enjoy today's solidarity and the ecologically strengthened 'with and for each other' far too much. Even my then aging mother liked that change so much. That you don't have to be heroic and ironclad all the time, do everything yourself and alone, but that there is perpetually more mutual support, more caring, and more togetherness among us.

Some of the steps towards a more socio-ecological orientation for physiotherapists also went through the switches of public transport and active travel. I mean, the 'bicycles and bicycle lanes for all' campaign was implemented in less than a year, and this was not least thanks to physiotherapists being recruited into every single urban planning team in the world. This is now standard practice and perhaps came at just the right time. Not because we needed more physical activity through active means of transport, but because urban planning was no longer an architectural question at all, but one of mobility. Progressive geological and marine changes made a clear demand for new, more nomadic ways of being together in a world fundamentally shaped by human and more-than-human migration, from the mountains below us, to the air and seas around us, to the animals in and with us. Everything is always moving.

Before that time, it sounded crazy that a physiotherapist rehabilitated bats because she found them fascinating, could not endure their

human-made suffering, and because bats are superstars of pollination and biodiversity. Today, physiotherapists working in biodiversity rehabilitation are nothing special anymore, ever since we reintegrated the treatment of animals and human-animal relationships as a core element of our work. Therapy dogs, horses, cows, cats, wombats, capybaras, and camels. The question is no longer unjustified and maybe never has been: Who is actually the therapist among us, providing health and recovery in the world. Us or them?

But maybe the important point is simply that we are really working together to rehabilitate ecosystems now. And what better time to start than between 2021 and 2030, during the UN Decade of Ecosystems Restoration. I remember how strange I found it when I was first invited on a research expedition to the Arctic to investigate the connections between health, society, and the Arctic deep sea, with all its wonderful geological features and life forms. And when it became clear that hydrotherapy is not necessarily only about us, but also about life in the water, and even about the water itself.

The critical point, however, may not have been the exact ideas and research findings during these supposedly wild beginnings, but that these beginnings normalised physiotherapy finally becoming a nature-therapy worthy of its name; that it became normal for physiotherapists living on the islands of the Mediterranean to help rid the Mediterranean of overwhelming plastic pollution and revive



Indigenous shepherding traditions to create more environmentally friendly employment and clothing for local inhabitants; that it became normal for us to not only work with colleagues from other health professions, but also hand-in-hand with entirely otherwise species and colleagues to address the complexities of health, happiness, and well-being.

When physiotherapy still happened in the clinic, all this seemed entirely impossible. I mean, it sounded completely insane. If someone had told us a not-so-fictitious story about it back then, possibly even at a research symposium of a society for physiotherapy science, we would have immediately called in a psychiatrist and taken the poor guy away, that he may never publish again. But transforming physiotherapy in a socially and environmentally oriented way was neither crazy nor impossible, nor a torment, or even loss, but refreshing, motivating, and an upheaval of energy with the most significant gains for health and well-being even in the midst of immense crises.

But who am I even saying this to? After all, we are sitting here at a symposium just like this, and we are fully aware of all these transformations. We were all there and were part of it ourselves. And it didn't even take as much as we initially thought, just the will to make at least a small start wherever we were; an exponentially growing number of people who also dared to start in a variety of ways; and perhaps a few seemingly preposterous stories in which we found the space and creativity to express our wishes and hopes for the world, health, and society. To then make them reality as we go forward.

Of course, there is still a lot to do, and we still have a lot of supposedly implausible things to imagine, no questions there, and we will not lack for things to do. But it is heart-warming to look back and see what suddenly became possible when physiotherapy finally stepped out of its clinic.

## EPILOGUE

This text is the transcript of a keynote given at the 6th research symposium of the German Society of Physiotherapy Science, DGPTW, from 31st September to 1st October 2022. It is deeply indebted to more sources of inspiration than I can mention in a brief paragraph. Next to every single member of the Environmental Physiotherapy Association, some particularly obvious ones include: David Nicholls and his work on Physiotherapy Otherwise; Berta Paz Lourido and Martina Borg, each based on their respective islands in the Mediterranean sea; Sarah Elizabeth Curran, the wild physio and her flying foxes; Sara Pedersen and Asgeir Andreassen Bergli, two (of many more) physiotherapy students that put their trust in me during their research project; Giuliana Panieri, a world-enthusiast, arctic explorer and Professor of Geology; and so many more.

Just when I had finished writing this keynote, I came across this recent quote by Judith Butler, also via David Nicholls' Physiotherapy Otherwise: 'Sometimes you have to imagine in a radical way that makes you seem a little crazy, that puts you in an embarrassing light, in order to open up a possibility that others have already closed down in their knowing realism.' For a moment, I thought to conclude the keynote by showing this on a slide but, somewhat disappointingly, realised that it doesn't actually apply to this keynote. This is because the entire keynote only includes about 10% fiction: each point and example it raises has either already been thought of, already been done, or is being worked on in one way or another at this point in time. The opening slide I had used, stating that 'The following is based on a true story' is much truer to the story presented in this keynote. But this comes with a simultaneous bitter-sweet taste, because it confirms how difficult it is to think up something that we have not done or thought of before, but also because so much good and radically otherwise things are happening already that there really is that tiny sliver of hope urging us forward and confirming that environment and society really are changing Eco/health care for good.

---

**Filip Maric**  
<https://orcid.org/0000-0002-1265-6205>

UiT The Arctic University of Norway

*Contact:*  
[filip.maric@uit.no](mailto:filip.maric@uit.no)

---

## THEREIN LIES HOPE

*By Jena Webb*

Zoiryn, who works for the Wellness Strata of the Mother Rock as an inner peace steward, has been tasked with designing a 500-year anniversary tribute to the 'Molting,' triggered by the first of a series of pandemics unleashed by humans encroaching excessively on natural spaces. In accordance with their ways, Zoiryn has been given carte blanche and two years to conceive of a commemoration to the achievements in living harmoniously that came about during that period of transformation. Previous memorials had covered the grand arch of the tumultuous period, but Zoiryn has always been more interested in details, in minutia, in the seed that became their new civilization, one that learned to live with nature rather than in its stead.

Forever a book lover, Zoiryn turns to the archives for inspiration. The inner peace steward's comfort zone is words. Zoiryn knows that probably hundreds of people were given the same task, with as little direction. Not a competition, but to tap into as much creativity as possible. They would have about a year to follow their hunches and then a

collaborative process of coproduction would begin to see how the disparate elements could come together as a whole. Others would at this very moment be turning to musical scales or hues. Zoiryn would lean on words, phrases, sentences, texts. And what better place to begin than the archives, that stately repository for the wellspring of their new world.

Zoiryn's Gradient of the Wellness Strata is charged with ensuring that everyone living within their Grove has access to the essentials of being at peace, and one of those is a fossilized bone. The act of communing with a bone was considered new at the time of the Molting, but, of course, it was actually ancient. It was part of a collective process of remembering and listening to the people who had held fast to the land. All our ancestors had, at one point, had a sense that nature was beneficial, but many Indigenous people had kept their attachment to the land alive and their knowledge of its link with health active throughout the ravages of the industrial revolution and the catastrophic period of capitalism. Bones are just one component of their nature-based medical canon.

Witness trees had become another backbone of inner peace. Part of this vigilant steward's work is to care for the health of the witness trees, cultivate them to provide the perfect bouquet, ensure that they are accessible to all denizens, resolve occasional conflicts. Zoiryn's use of the word backbone coalesces a connection, a parallel. Nowadays, the fossilized bones used by the Grove inhabitants are most often suspended in a witness tree, in the fashion of the Innu ancestors. There, they could be borrowed and returned. Zoiryn's job is to make sure that there are always some available for the taking. People learn from a young age which types of distress are best attended to by sitting in a witness tree, clutching a bone, communing with animals or steeping in water.

Things had gotten worse before they had gotten better. As the wars raged, waves of climate refugees fled droughts that scorched fertile plains and what were termed 'biblical' floods that ravaged populated centres. Eventually, more and more people began to realize that the system was not working in their favour. They began to question the teachings of the Chicago School of Economics and the Bible, realizing that they were based on the musings, and ravings really, of people concerned only with themselves and those like them – their same gender, racialized-state/phenotype, culture, orientation, beliefs. If there were something like an ultimate sin in Zoiryn's time it would be exactly that – putting yourself and those like you before others.

Following the Molting, in the early days when the elders still remembered the time before, people started destroying bibles. It is only a tale after all, but the ancestors traced back our egoism to those early creation stories and realized that the xenophobia and speciesism found in them were jeopardizing our capacity to connect, to relate, and that that disconnection was making us ill. In their zeal to create new narratives they destroyed all but two of the "original" bibles, which were not original at all, but dated from a time when many people still believed that particular story. What we inherited from that episode, some 400 years later, was that whoever writes a story has a responsibility.

Having studied several novelists who were contemporaries of the pandemics – Margret Atwood, Cristiane Vadnais and Cherie Dimaline, for example – Zoiryn had come away with a rather glum vision of 21st century speculative fiction. Not that it wasn't understandable, nor that it was undesirable or unconstructive. It just seemed one-sided. The knowledge lenders taught these books as if they were warnings and always pulled out the greed at the root of the misery therein as the moral of the story. The bibliophile steward often contemplates, though, whether there wasn't more to the tales of those times than the knowledge lenders showed them. The literature of the 26th century was so rich, so varied. What might be hiding in the unopened texts from that era? Zoiryn sometimes wonders if they weren't guilty of the very thing



they reproached most in their ancestors – a lack of tolerance and an unwillingness to engage in empathy with these relatives who almost brought humanity to the brink.

Zoiryn takes the opportunity to visit the fiction section of the archives. There, a few volumes by Ursula Le Guin, unopened for centuries, are exhumed by the curious steward. The future one could put together from this collection of stories was neither dystopic nor utopic. Zoiryn thoroughly enjoys the complexity of the world created by the novelist and becomes absorbed for weeks by the tales, reveling in their potential to inspire.

Zoiryn sees in the gradients of literature a shift from perpetually seeking the infinitely vast, the grandiose – a career of fame, for example – to seeing the infinitely subtle, the intricately detailed and the immensely complex. This focal transference to the small yet numerous became the hyperlocal, the microlocal. The ancestors resolved the problem of scale that their predecessors were grappling with by changing focus. It wasn't how to scale up local solutions that was necessary. It was simply scaling back that allowed them to see the immeasurable value of their local surroundings containing therewithin their own ready-made solutions. Being able to rejoice in narrower gradations was the challenge after 600 years of looking out, over the horizon to new shores. For the people of the time, it was hard to look in again.

A body of literature that Zoiryn is intimately familiar with is the period of Deep Molting that came after system collapse. These ancestors are the ones who are usually credited with the changes that gave way to the current world, and of course their contributions were crucial. It annoys the inner peace steward, though, that so little credit was given to the dissidents who lived through that final hoorah of greed. It also irks Zoiryn that, despite having successfully refocused on the local in the day-to-day of their current lives, they still idolized a select few heroes of the Deep Molting, retelling the same legends about epic acts of change. What had always fascinated Zoiryn about the literature of that epoch were the countless descriptions of ecosystem recovery, the astute observations of species' return, seasons' recalibration, a resyncing with the cycles by ordinary people.

In the 21st century speculative fiction found on the shelves alongside Le Guin, Zoiryn discovers their ancestors' ability to see past time, to redefine territorial relationships of mutual belonging and to explore the boundaries of what it means to support. The perceptive steward carries over our ancestors' gift of imagining new therapies that harness yet-to-be-developed ways of relating, human-canine relationships or activism, while capturing the healing power of healing on the healer. Zoiryn delights in the beauty of metaphor that helped the people of the time reconstruct their concept of reciprocity and community, delves

into the fictional lives of our photosynthesizing offshoot species and marvels at the power of holistic pelvic policy. Alongside our ancestor's suicidal tendencies ran a deep vein of hope for not only survival, but thriving.

So much of what was produced in that time was intellectualised or externalized. Zoiryn had never paid attention to what it must have felt like for the people of that period to face their future, had never tried to. Modern people had been taught to disdain the people responsible for that degeneration, to fear their selfish impulses. Zoiryn now tries to pay attention to the ancestors' hopefulness. To embody the paying attention.

Closely on the heels is an uncharacteristic feeling of self-doubt about being able to represent someone from another culture, another time, any other being, human or otherwise, in fact. Is it ethical to do so? If you have some insight into their reality, though, is it ethical not to do so? Is there an accountability to the current times? To the protagonists? Or only to the reader? Oneself? What if we are only answerable to the future?

The inner peace steward has not yet decided what a commemoration with a Zoiryn signature will look like, is instead simply engaging in discovery, leaving oneself open, following opportunities and trusting intuition. What Zoiryn is sure of though, is that it will be hopeful.

**Jena Webb**

<https://orcid.org/0000-0002-5763-3381>

Community of Practice in Ecosystem Approaches to Health (CoPEH-Canada), Canada

*Contact:*

[webb.nnifer@uqam.ca](mailto:webb.nnifer@uqam.ca)



Health  
Punk  
vol.2

