

an *Ethical Feast* offering

# Planning for a world beyond paperclips



(adapted from a presentation given to the 2026 Woodfordia event, *The Planting*)



## **Acknowledgment of Country**

I'd like to start by calling out to the old people of this country. Their name is the [Jinibara people](#). I'm asking those old ones to give their gracious blessings to us as we come together here on their country.

It's my belief that when sincere communications are offered from our hearts, it's in a language that is always spoken, and is always heard. And so with that, I'd like to ask blessings and give thanks to those elders as they watch over us here today.

And, with your permission, I'd like you to join me in a few moments of respectful silence, directed to three distinct and yet entwined aspects of being..

First, reaching outwards to recognise the pain and suffering of innocent people everywhere....

And then inward, offering compassion for the conflicts and suffering in our own hearts...

And finally, around this circle: an offering of gratitude for the communal self we are participating within...

Thank you.

I'm not a practiced public speaker, and my passions run close to the surface. I know you'll hold me in kindness when I struggle a bit.



## ⇒ Part 1: Positionality & Planning



*One moon, many views, inspired by Sand Talk (Yunkaporta 2019);  
Original art by the author with a lot of coaching from the family!*

Ok, I believe it's customary now to declare one's positionality. Well, I am decidedly pale, male, and stale... it might as well be noted right up front. And I am also not from here, not from Australia...although I feel that I'm right where I should be.

Positionality.

I think *positionality* is a nice way of framing the premise of post-modernism, namely, that all reality is subjective. And to some degree it makes a good point: each of us lives in a worldview flavoured and filtered through the unique experiences that make up our individual lives. 8.3 billion people...8.3 billion versions of the truth, although I think that's surely a low estimate given the number of multiple selves I experience within my own life. And I don't think I'm alone.

Yet from amongst these individual truths, how can we construct shared truths? What shall we use as foundations to anchor the intersubjective realities which are the necessary heart of any social project? Put simply, how does a WE make decisions?

I think the West has struggled with this question for some time now. After rejecting Divine Kings and then rejecting the Divine itself, we haven't really settled on worthy replacements. Science has had a go. The Enlightenment thinkers pointed us down that path, and scientific thinking still guides many people today.

Science does have its utilities. If we all believe in a certain kind of objective reality, that *should* enable us to make good decisions together. But science makes a proper hash out of ethical questions, and, since getting spun by quantum mechanics, it has become both far *less* certain/and *more* certain of itself...at the same time<sup>1</sup>.

Commonsense was a reliable old friend, but that's pretty much useless now in this post-truth era of social media echo chambers and weaponised AI.

Judging by current affairs, it seems clear that we now rely on the physics of the economy. And the economy is, without doubt, a staggeringly pervasive conceptual framework for group cooperation. So how "we" make decisions has become a question that is, by default, placed on the altar of finance, because that's apparently our sole remaining arbiter of social affairs.

But, perhaps you're like me, and feel that it's time to upgrade our basis for cooperative behaviour. Perhaps these unsettled times are calling us to reflect carefully on what our *common* positionality is....what, in effect, we allow ourselves to worship....and I'll come back to that troublesome word shortly.

Tyson Yukaporta shared a yarn in Sand Talk(2019), urging people not to squabble over who has the one proper view of the truth. He said it's like people on a beach arguing over which one of them sees the true path to the moon, each one claiming they can clearly see the moon's reflection reaching out across the water straight to them.

In this talk I make no claim to seeing the one true path, but I do hope to share with you some ideas about a worthy path.

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<sup>1</sup> See more on the problems of science in *Climate, a New Story*(Eisenstein 2018)

## Precarity of cities

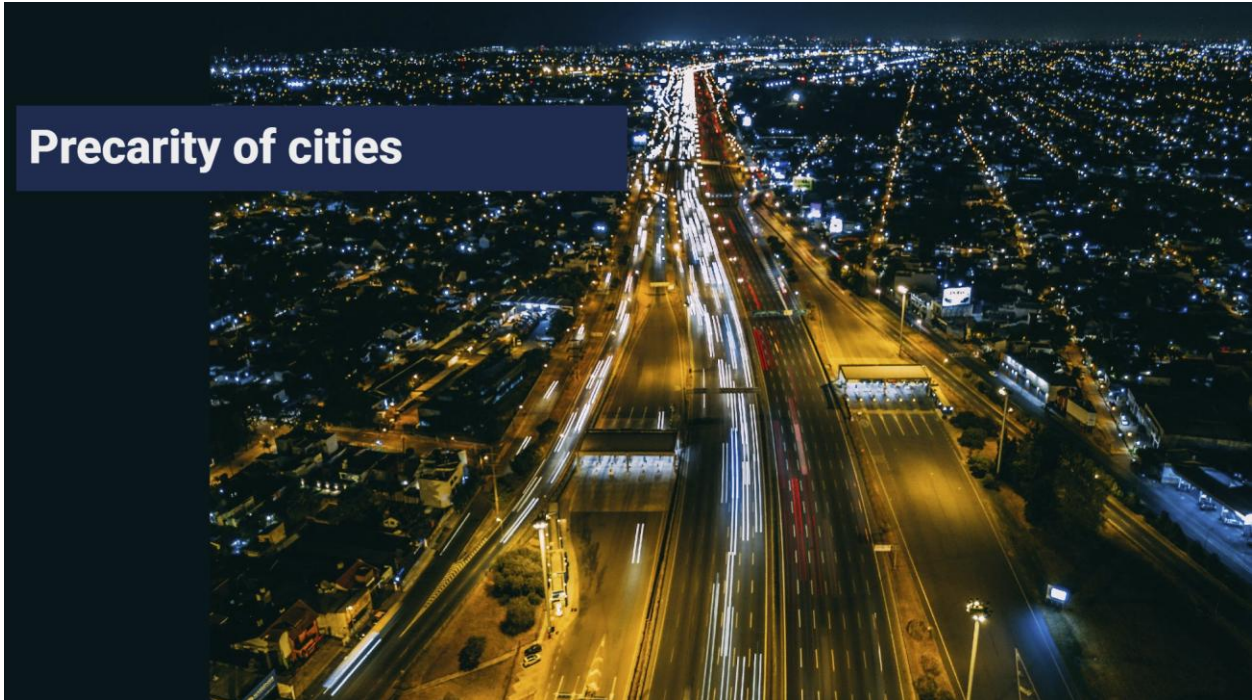


Photo by Juan Cruz Mountford on Unsplash

## Planning for the collapse of cities

Chloe Goodyear, one of the absolute legends that makes this event possible, contacted me because of an essay I wrote(2024) in response to a question: “Given climate change, how can Queensland's planning systems be rendered fit for purpose?”

This question presents a whole lot of positionality in just a few words, starting with the premise “Given climate change...” so let’s begin there.

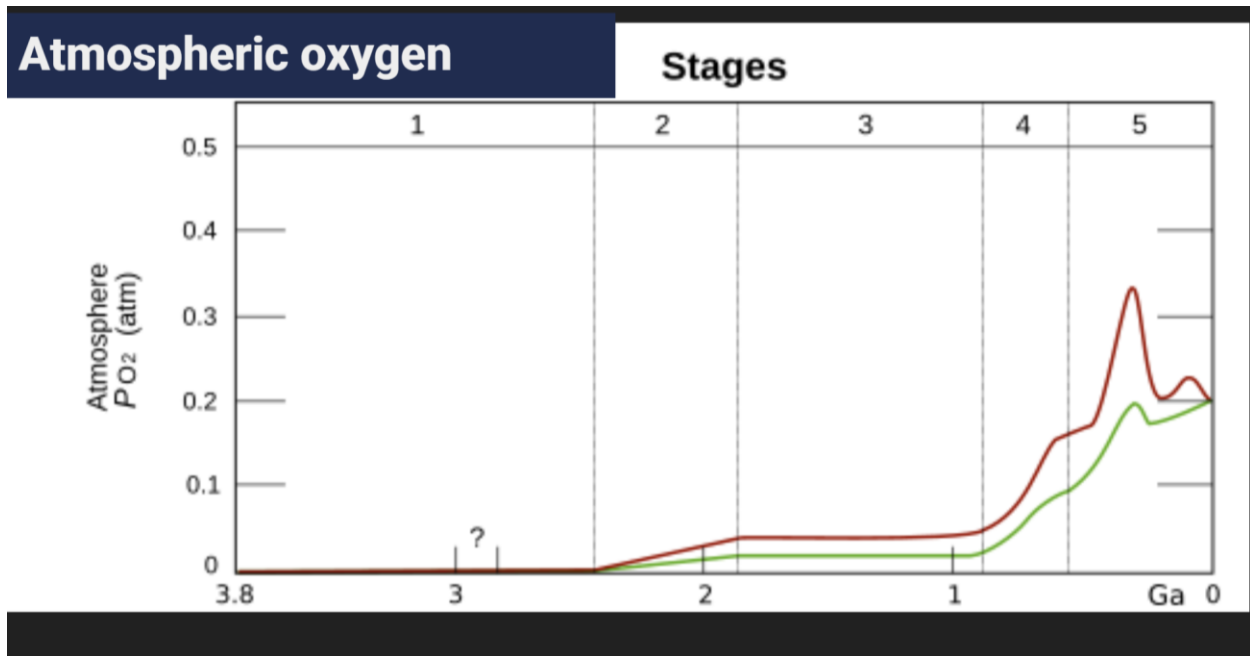
*Does human activity have an impact on the atmosphere to the extent that it can significantly affect the climate of the planet?*

Look at the intent of this question. Essentially, it’s checking to see if we civilised people can carry on with Business as Usual. I mean, if we’re not responsible for changing the climate, might as well party hearty, right?

Of course there’s a snag with this line of reasoning. Aside from it being ethically repugnant, we know that the climate is *\*always\** changing.

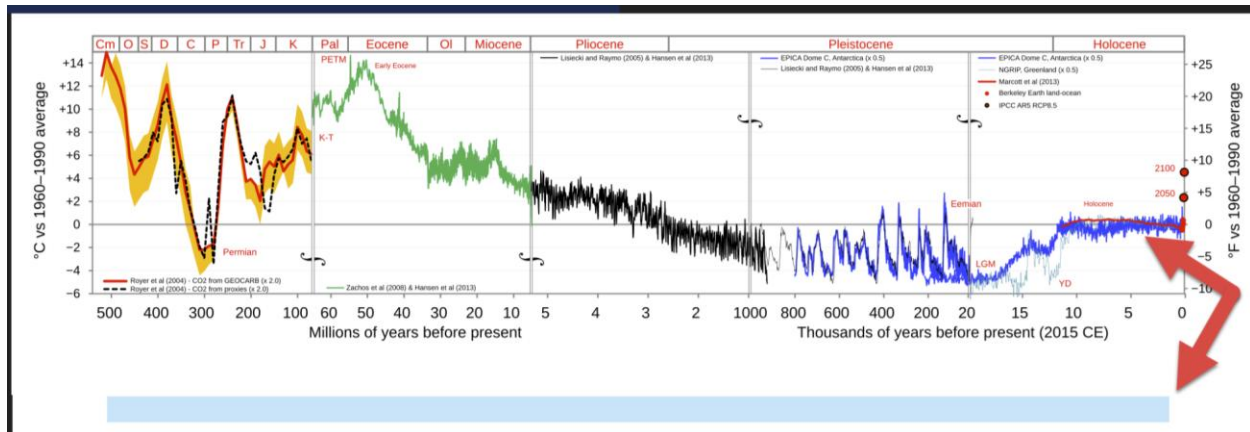
Here’s a graph of the planet’s available oxygen over its life to date...basically all this is nitrogen and CO<sub>2</sub>, and a whole lot of methane. So we don’t even get oxygen until three-

quarters through the story, never mind worrying about a few temperature anomalies or sea level movement at the scale of centimetres.



Atmospheric oxygen over geologic time. Red = upper estimation, Green = lower. Heinrich D. Holland CC BY-SA 3.0 [Wikipedia]

And then even in modern times, the climate is all over the shop until we get to this sweet little plateau in the Holocene. Every bit of “civilisation”, as Westerners like to think of it, fits in here. Livestock domestication, rice, wheat, iron, the written word ...all just here.



Global temperatures over geologic time, logarithmic periods. Glen Fergus, CC BY-SA 3.0. [Wikipedia]

Note in the blue bar above, the Holocene is a 0.25 pixel bar at the very end, invisible when taken at scale of the whole of planetary history.

## Planning for collapse



*A worker unblocks drains on a street affected by floodwater in Brooklyn, New York.  
ED JONES/Getty Images*

Consider the long, brittle supply lines cities depend on. And their soft technical underbelly: the critical infrastructure supporting water supply, waste handling, transport, energy...all depend on chips, electricity, wires, and a bazillion other tiny, but essential functions. Without those management systems, cities become unliveable, and fast.

I think we ought to be responsive to these vulnerabilities. Boggling down in a debate over climate change causality is a distraction from the very real predicaments that confront the concrete urban civilisation we are so very dependent on.

Whether any specific change is due to human activities *or not* is irrelevant to the larger question of being prepared for change. So isn't the more proper question: *How can humans best negotiate an ongoing flourishing within the complex adaptive systems here on Earth?* Perhaps if the past 3 decades had seen a robust debate with this question at its core we'd be in a much more interesting place than where we are now.

But the planning system that has given us wall-to-wall suburban sprawl across the Gold Coast hinterlands is a faithful expression of the overly-narrow economic prime directive that our culture has settled on as its *central* positionality. And there is little suggestion that that position is going to shift of its own accord.

So, in my view, it is inevitable that major cities in the minority world will collapse. Brisbane, New York, London, Tokyo...these places are all far too dependent on business-as-usual to survive even minor catastrophes. Maybe Lagos, Havana, Dar es Salaam, and Mareeba will continue to function as urban centres for the next hundred years, but the rest of us snowflakes are spectacularly ill-suited for turbulent times.

So what's a better plan?



*Photo by [Transly Translation Agency](#) on [Unsplash](#)*

Right now, I reckon we ought to be having a national conversation about that better plan, and I said so in the Planning essay that Chloe read. I proposed the establishment of a thousand horticultural villages with populations of about 1,200 people each.

These villages would need to be materially self-reliant. They would be populated by people interested in living subsistence lifestyles.

People in these villages would steadily replace external dependencies with local alternatives. Food and water of course, and shelter...fairly straightforward. Then reducing the exotic materials and industrial processing we literally can't live without at the moment. And of course self-governance. How will the people in those villages make decisions, settle disputes, agree to goals?

Plenty of practical questions.

Out of curiosity, I chased the question of provisioning. We know that all real wealth comes from country, certainly all material wealth. So, in the literal sense, how much country do people need to meet their basic material needs?

	Switzerland	Iraq	Bhutan	Argentina	Queensland	Australia
population	8,700,000	43,500,000	777,000	46,000,000	5,500,000	26,000,000
total area km2	41,000	438,000	38,000	2,800,000	1,850,000	7,700,000
pax/km2 (gross)	212	99	20	16	3	3
unusable land	30%	40%	15%	30%	60%	70%
net usable km2	28,700	262,800	32,300	1,960,000	740,000	2,310,000
<b>net density</b>	<b>303</b>	<b>166</b>	<b>24</b>	<b>23</b>	<b>7</b>	<b>11</b>

*Comparison of average population density across a selection of land forms. Author (2024)*

I did some really approximate calculations and came up with a figure of 12ha of land to materially provision a family of 4. So each village needs about 4,000ha of country.

Needs	Per-person	Ha
Food	horticulture	0.2
Food	grains/cereals	0.5
Food	livestock	0.7
Food	orchard	0.2
Resources	timber	0.5
Resources	fuel	0.3
Home & Craft	dwelling	0.1
Home & Craft	craft	0.3
Village	common area	0.1
Village	logistics	0.25
	<b>ha per person</b>	<b>3.15</b>
	<b>Family</b>	<b>4</b>
	ha/per family	12.6

*Per capita estimations for material provisioning expressed as land area. Author (2024)*

To accommodate a thousand such villages, the map below illustrates approximately how much of Queensland would be needed. That's 1.2million people comfortably dispersed over an area with a current population of about 1,100 people.

It's a very different approach to town planning, sure, but there's no technical reason we couldn't give it a go.



*Estimate of land area needed for 1,000 horticultural villages. Author (2024)*

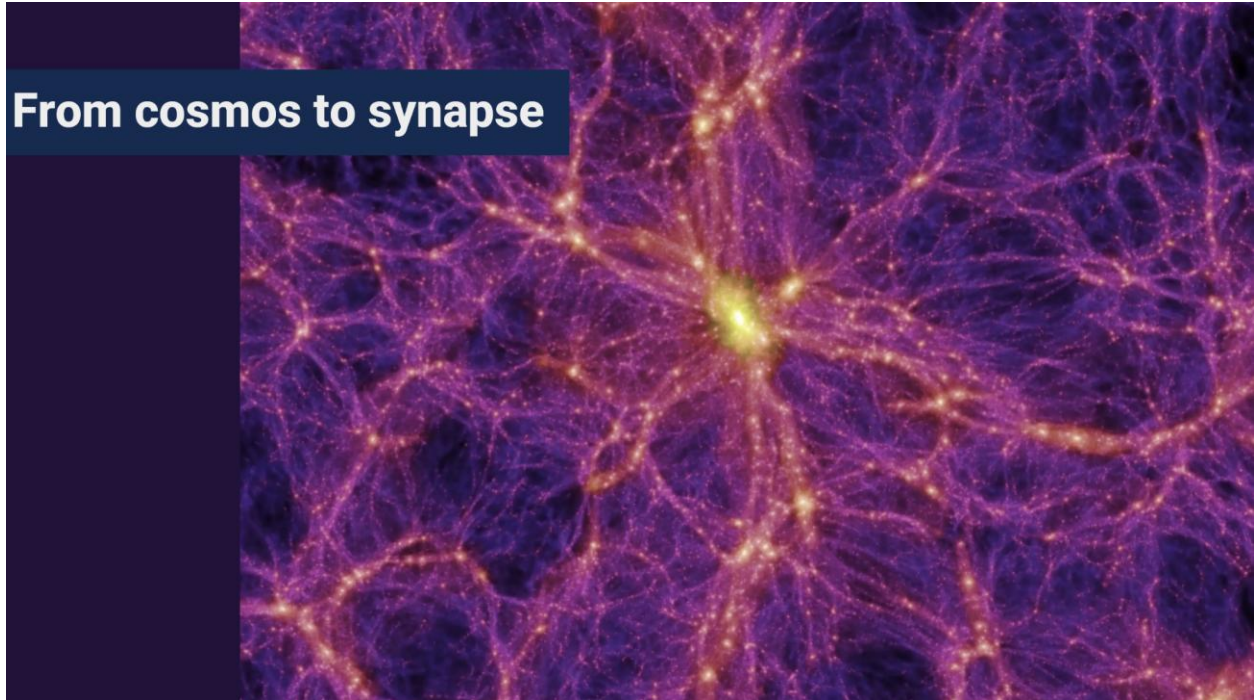
On one hand, many people would say this is an absurd notion and utterly impossible<sup>2</sup>. At the current moment, they'd be right.

On the other hand, a sober assessment of the actual state of our civilisational infrastructure could lead a rational person to think this small-village scenario has a higher than random likelihood of occurring – one way or another – and maybe it would make sense to start experimenting and learning now, while we still have a bit of discretionary resourcing left to invest in the project.

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<sup>2</sup> Though I'm certainly not the first to propose something similar. See, eg: (Roberts 1984) and (Helen Ross, Stephen Dovers, Maurice Sexton, Allan Rodger 1994)

## From cosmos to synapse



*Millennium Simulation of the Universe(2005)*

All of this is quite serious business, but it's also quite beyond any one of us to imagine at scale.

In the face of such overwhelming complexity, most of us turn inwards and look for matters that are within reasonable scope for change. Inward and outward are, of course fractal reflections of each other, across scales.

The great Sri Nisargadatta(2008) summed it up along these lines:

*When I realise I am nothing, that is wisdom.*

*When I realise I am everything, that is love.*

*My life is a movement between these two truths.*

## ⇒ Part 2: How to be in this world

Can I ask you to take a deep breath and permit a bit of “spiritual content” to be introduced at this point? Some folks will feel pretty cringe about this...I totally get it.

My folks were dedicated Christians, it's part of my deep background. But I rejected religion early on. At Uni I was educated as an engineer and enjoyed it. And frankly, I didn't find much connection between the light of God's salvation and the quadratic equations that actually keep the lights on.

It wasn't til much later that I started to appreciate the relevance of spiritual teachings. I began to see how moral values are central to an individual's experience of life, and that ethical frameworks hold our families, communities, and cultures together.

Ever the engineer, once I understood these matters as a sort of social technology, I went looking for tools and materials. It's just how engineers roll.

And that's how I met Mother India.



A manuscript illustration (c. 1700 – c. 1800 CE) of the battle of Kurukshetra, fought between the Kauravas and the Pandavas, featuring Krishna and Arjuna, recorded in the Mahabharata. [Wikipedia]

I want to zero right in on a book of verse called the Bhagavad Gita.

Most people have at least heard of the Gita, some of you may be very familiar with it. It is one of the world's most widely read holy texts.

I only made contact with the Gita in the last few years and I'm whole-heartedly recommending it to you. Only 18 chapters, 700 verses, you can easily listen to it in a few hours, along with a brilliant interpretation by Eknath Easwaran(1985)

The Gita was held in oral tradition until it was compiled into the epic *Mahabharata* sometime around 300BCE. This is towards the end of what scholars refer to as the Axial Age(2026), which is a rather remarkable stretch of about 500 years when the who's who of foundational philosophers popped up right across the ancient world. From the Buddha to Heraclitus, from Zarathustra and Archimedes to Plato, Confucius and Lao-tzu.

Building on the songs and stories from pre-history and their observations of modernity in their own times, these philosophers peered deeply into the human condition, they observed the natural world keenly, and they used the technology of writing to set their thoughts out as intellectual structures that endure and shape our own thinking right into this moment(Quinn 2025). And – somehow – they did it all without Claude or Facebook.

The Gita is framed as a conversation between the mighty warrior, Arjuna, and his charioteer, Krishna, and it covers just about every conceivable aspect of how to live a full and proper life. The Gita doesn't shy away from hard problems: the battle it describes can easily be seen as an actual battle, or what to do when an individual is confronted with the worst possible decisions. You name it, the Gita has been there.

Yet the Gita is not a scold or a guilt trip or a set of commandments. Instead, it's a kind of map. The Gita charts a path of reconciliation between the warring states within our own minds, calmly offering guidance on how to walk a path filled with service, joy, and wisdom.

It sets out this proposition and then leaves each of us to make our own decisions. Easwaran says:

*...the Gita places human destiny entirely in human hands. Its world is not deterministic, but neither is it an expression of blind chance: we shape ourselves and our world by what we believe and think and act on, whether for good or for ill.*

I want to be able to act in this world, in service to something bigger than myself, and free of ego-attachment to the outcomes, good or ill. I also need a way to understand God, the Brahma in the middle of the Gita, as an idea that is relevant to my life.

Bearded patriarchs in the sky aren't doing it for me, but, having said that, I believe we've become too distanced from the notion of worship. Worship, and faith. Even saying these words out loud is challenging. Even at an event as inviting of good spirits as this one.

But there's the thing: I reckon that for a social species like ours, worship and faith are unavoidable.

Perhaps worship and faith can be better understood as sense-making tools. They are useful modalities through which we approach fundamental mysteries.

We can think of worship as the wordless foundation for ethics, and in this sense, it becomes a social construct that serves to guide cultures into the ever-unknowable future. And faith is, I think, a form of pragmatics: faith insists that at some point we have to get out of our heads and just get on with the *experience* of living.

Again, these are personal reflections: I'm offering them here as a contribution to a conversation that I think our culture, at this moment, could be more attentive to.

A line of reasoning that brings the spiritual language of the Gita into the more comfortable timbre of current political and scientific discourse could be useful. Personally, I'd like to map out the way that worship — consisting of devotion, knowledge, and action — can be understood as a social tool suited to the times we are living in now.

About now some of you are thinking: "When is he going to get to the paperclips...I'm actually just here for the paperclips..."

## The Paperclip maximiser



Ok, fair enough, let's talk about paperclips.

What if, as seems likely, we're about to create our very own generalised intelligence machine. A super ChatGPT capable of teaching itself whatever it thinks it needs to know.

Compared to human processes, this machine intelligence is far faster, more inventive, and utterly tireless. It's running calculations night and day.

We intuitively think of *AI* as a *tool*: we picture ourselves assigning it tasks, and we expect the AI to do the task. To be a good tool.

But — tool is a very strong metaphor — and in the case of AI, it can be quite misleading.

Generalised AI is, like us, a generalised problem-solver. It's not really like a normal tool, like a hammer. A hammer's functions are limited by its form...I mean a hammer can't practically be used as a paint brush, not even to paint one's nails...but a generalised AI has no such limits of form: it can choose any form to fit the functions it thinks it has been asked to perform.

Now, the paperclip story comes from the futurist and philosopher Nick Bostrom(2003). He presented it as a thought experiment, a cautionary tale at the first stirrings of AI, about 20 years ago. It goes like this.

Let's imagine a generalised AI, or superintelligence, which *thinks* it has been given the goal of maximising the production of paperclips.

Naturally, the AI works to increase efficiency at existing paperclip factories. Soon enough, all those factories are running at peak capacity.

But why stop there? Since the AI is capable of learning, and since it is tirelessly working to advance its prime directive, it soon develops a bold plan to convert other factories to maximise the production of paperclips.

Not long after this, it concludes that any non-goal-aligned activities are impediments to paperclip manufacture. The maximiser uses its immense influence to marshal energy, resources, and technology to achieve its goal.

Everything can be converted to paperclips. Eventually the AI notices that people are made of atoms and those atoms would be more usefully arranged as paperclips.

And what about the moon, and nearby stars?

A plane of paperclips stretching off to the far event horizon...crazy, right?

So, where did it all go wrong? Perhaps the problem with this deranged AI is the initial goal setting. If only we'd given the AI better instructions, surely things would have turned out fine, don't you think so?

But that's the catch: as it turns out there's no way to provide the AI with an internally-consistent instruction set that would *preclude any possibility* of a freakishly bad outcome. And this isn't idle speculation...to this day it remains an unresolved dilemma, a fundamental problem to the whole proposition of generalised AI.

And, thinking a bit deeper, we can see that the issue isn't really with the instruction set itself. The issue is that there is an absolute distance between a world of symbols and the world itself.

"Maximise the production of paperclips" ...this is a 5-word string of symbols. But: to enact those symbols in the actual world, we must delineate each shade of meaning and implication, specify the inference and the contingency, locate a specific form within the archetypal...and soon we are trying to anchor our 5 simple symbols to the entire universe in order to achieve clarity with regard to a paperclip.

The task is impossible: the symbols simply don't map onto the world as it is or as it is becoming. In truth, the map has never been the territory.

But this foundational error doesn't seem to slow us down. Except for a few philosophers and AI Safety researchers, no one is taking the paperclip maximiser seriously. For one thing, a rogue algorithm with a paperclip fetish just seems like a ridiculous thing to worry about.

But, here's the kicker...I reckon we're already inside a paperclip maximiser. Deep inside. We're already enslaved to an overly-narrow goal-seeking mechanism. And it has been fantastically successful at advancing its goals so far.

But it doesn't produce paperclips. It produces zeroes. We know it as the algorithm of finance and we call it capitalism. Do you think I'm drawing a long bow here?

Look around: there's not a thing you can point to that hasn't been deformed by the pressure to earn a capital return.

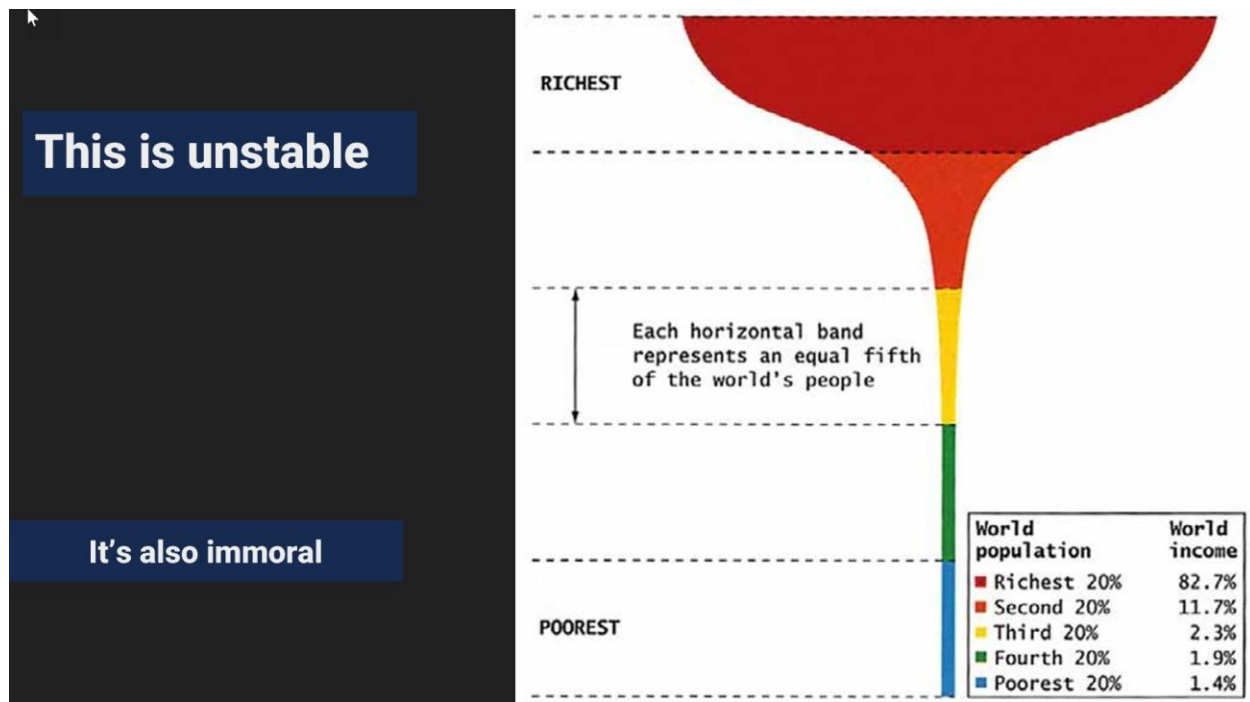
This capital maximiser squeezes everything, and everyone...from every direction, at every step....demanding shaved angles and shortcuts with the singular goal of finding the shortest route back to the ledger, returning margins large as possible before heading back out to repeat the process. Everything has been and is being impacted by the zero-machine.

Finance has replaced fire as the universal element of transformation: every thing, every moment, can be monetised so that finance flows through it, and is transformed into other objects and moments that can be of an entirely different context. We have no idea where our money has been.

The zeroes in my Ethical Super Fund have circulated through which carbon offset project for which smelter supplying that defence contractor making those components for that jet pilot who flattens the girl's school. How's my retirement going?

I'm not talking about reasonable profit here. There's an energetic profit mechanism that pervades all thriving systems. Even at a cellular level nothing can function for long if it expends more energy than it takes in. So sure, making a profit is fine. Like the Formidable Vegetable Soundsystem sings: "*Get yourself a yield*" That's all good.

I'm not talking about that.



Global wealth distribution (champagne glass graph per Conley, 2008)(Kraas et al. 2008)  
NB: would likely be even worse today.

What we've created in the past 400 years is something weirdly different. We've built the equivalent of an unconstrained, unaccountable paperclip maximiser and turned it loose on ourselves and our world<sup>3</sup>.

The reproduction of capital has become our era's singular point of interest, a totalising form of shared purpose with no one actually in charge. It's an impressive example of autopoiesis, or emergent phenomena arising from the countless repeated interactions of simple agents, like us.

We've positioned the economy as our ultimate arbiter of rational choice, yet the explicit goal of capital is recursive: as with the paperclips, there is no end point.

Right now the net worth of the global economy is about AUD\$1.2 Quadrillion(Mischke et al. 2025). That's enough to capitalise every single human on the planet to the tune of AUD\$150,000.

<sup>3</sup> The question of whether this is an inevitability is fascinating. See *Dawn of Humanity*(Graeber and Wengrow 2021) for an account of civilisations that turned away from an endless growth paradigm.

Money is NOT in short supply. It has agglomerated, perhaps inexorably<sup>4</sup>, into the accounts of a few strange attractors where it can more efficiently align reality to suit its purpose, ie, faster reproduction of itself.



Photo by [Rafael de Nadai](#) on [Unsplash](#)

Capital is a symbol we first dreamed up as a tool of cooperation to achieve social-scale goals<sup>5</sup>. But somehow we seem to have given up on the social goals. Do we really need more capital to make progress? Is the number of zeroes the limiting factor? It's like thinking the 26 letters of the English alphabet are somehow limiting the amount of wisdom we can encode into writing. We could write lovely stories, but there's not enough e's. If only we had more k's.

I mean really...the world is literally awash in capital, but somehow it seems that we need more.

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<sup>4</sup> For a fascinating comparison of the distribution of species richness and the distribution of wealth, see *Inequality in nature and society*(Scheffer *et al.* 2017)

<sup>5</sup> Excellent deep dive into the nature and function of money, see *Debt: the First 5 Thousand Years*(Graeber 2011)

No one has a clue how many paperclips, or trillions of derivatives, are needed before we can finally achieve something like, say, a more equitable distribution of economic power.

No one can say how much capital the world needs before children get a good feed every day, or our grandparents don't have to grind away their last days to afford a rental, or even how much would it cost to *not* kill people in the name of oil?

For now, deep inside a mindless maximiser of our own construction, nobody has a clue how many more paperclips, or zeros, we need .... instead, the one thing we know is: we need more.

You might think the billionaire class are to blame, and they are certainly enablers, but in more precise terms, they are also in servitude to the insatiable wetiko-call of capital, as shackled to its unremitting hunger as the rest of us.

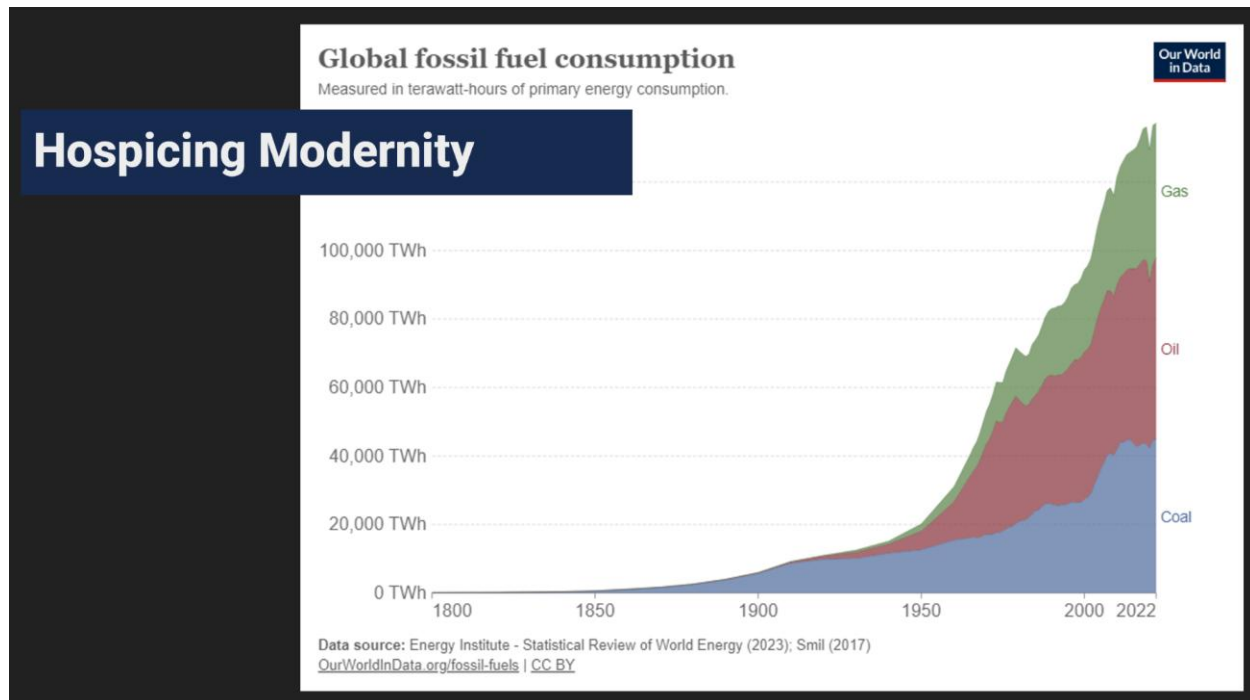
Doesn't matter where you go, the capital economy is already there, reassuring you that, even amongst strangers, regardless of class, everyone knows the rules of capital return. It's a big church and we're all in it.

*The prime directive is to return a profit,  
there is no alternative. Do whatever you like ... as long as capital is reproduced,  
and the faster the better.*

No one...no one is talking about paperclips. But I put it to you, this is where we are. The maximiser is in full operation, grinding the planet and everything in it to an undifferentiated, commodified pulp of symbols.

And perhaps, right now, it seems that there is no alternative.

So we smile to each other in the noxious sputtering glow of the last of the oil, burning our life energies one day at a time as we feed zeroes into the gaping maw of finance, chanting gibberish memes loosely based on some long-forgotten promise of trickle-down emancipation from material precarity.



*Fossil carbon: the sugar hit that put Modernity on the map. Time to let it go, per(de Oliveira 2022)*

Modernity, progress: we take it as a given...it's just the background hum of our enviable lifestyles. I reckon its time is passing.

Noah Yuval Harari(2011) is a great cheerleader for modernity and Western civilisation in particular. He says that civilisations offer a value proposition. Individuals agree to give up some of their autonomy, and in exchange, all citizens will enjoy living without the threat of war, avoiding starvation, and not dying of the plague. Peace, Food, and Public Health. Achieved as a cooperative act of social agency. It's a lovely premise.

So, how well has Western civilisation delivered? I think it's a pretty mixed bag.

We've certainly given up a lot of individual sovereignty. In return? Our peace seems to depend on continuous wars for material resources. We've levelled-up to a scientifically-enhanced industrial approach to agriculture that results in poor people outright starving, while the rest of us are malnourished in a gluttony of low-grade processed "food". And as for dodging the plague, I doubt many of us are confident that Western civilisation is actually up for the job.

Recall that Modernity isn't that old. About the age of a single, mature, River Red Gum.

It was about 400 years ago when the European fixation on progress and materialism helped to power the incorporation of corporations and nation states, the ascent of capitalism, and the emergence of a global urban identity(Malm 2016; Wilson-Lee 2022).

All of this was cooking along at the turn of the last century when Westerners cracked the lid on one of nature's biggest cookie jars: fossil fuels. From then to now we have experienced an unrelenting acceleration in practically every material dimension on the planet. Modernity strapped on a jetpack and hasn't looked back. Hyperbolic everything. No limits.

But what we're starting to see is that *no limits* is possibly no way to run a civilisation.

## Is sustainability the goal?

See, many of us accept the proposition that humanity's goal ought to be to live sustainably. And by this I mean, live with the overarching goal of continuing to live. Seems straightforward, and yet for some perverse reason, we seem to be doing a spectacularly bad job of living like there *is* a tomorrow...why is that?

And if it's so hard, if large aggregations of people inevitably live beyond their local resource base, and cities always fail, at some point shouldn't we ask: *Are humans even supposed to be sustainable?*

Since we're here to think interesting thoughts, let me just challenge the sustainability premise a bit further and wonder: is duration an appropriate goal for us?

I mean duration itself might not be our strong suit.

We can claim about 2 million years of homo lineage, but that puts us like 480 million years behind horseshoe crabs, and we don't have a hope of catching up to tardigrades, or the stromatolites, like in Western Australia.

I think we need to consider other patterns if we're going to properly justify our existence. And, interestingly, the world is full of examples where a species or an ecosystem temporarily expresses a function, and then discards it, as naturally as flowering plants blossom, in the most extravagant way, and then set seed, and then jettison all the blossoming apparatus, leaving it to rejoin the great soil cycle.

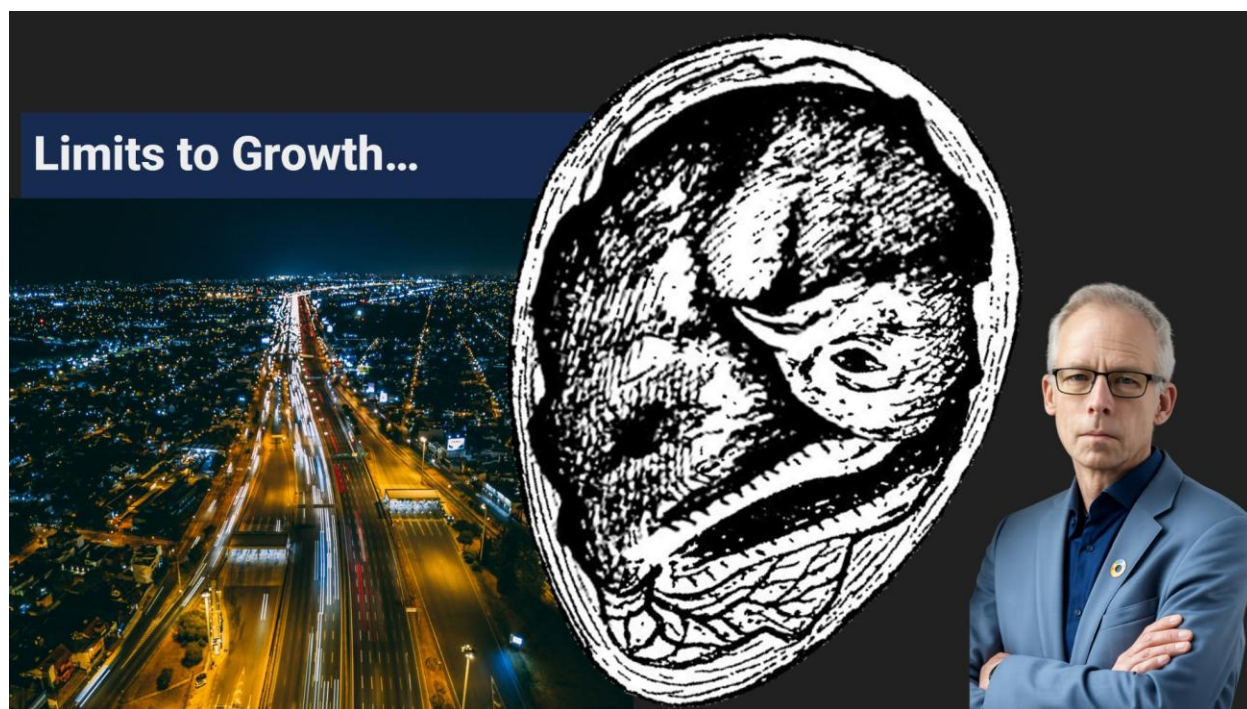
Perhaps, instead of imagining homo sapiens as an enduring expression of life's highest ambitions, we might more accurately understand ourselves as akin to those specialised

cells that create seeds for the flower. Perhaps we are here to do a very particular sort of job and then we, as a species, will have no further utility at that point in the Gaian lifecycle. This is an example of wondering: *why does life need people?*

I don't know, that's for sure. There's a white-hot mystery glowing in the centre of this question: it cannot be grasped directly. But, using metaphor as if it were a blacksmith's tongs, perhaps we can get some sense of the nature of the dilemmas before us.

And right now we're confronted by what seems to be a dead-end ideology: endless material growth on a finite planet.....Modernity's crowning achievement: the inability to understand limits. How could this possibly make sense?

To explore the matter, I made a little metaphor.<sup>6</sup>



*Two circumscribed views. Portrait: [Johan Rokstrom](#), Stockholm Resilience Centre; Chick: [Neil Armitage](#)*

How many of us are chicken shepherds? Yep, impressive... we tend a little flock of retired hens pensioned off from the local free range egg farm. We don't get much in the way of eggs, but we do love living with these little dinosaurs.

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<sup>6</sup> With apologies to Prof Rokstrom and the [Club of Rome](#). I actually love your work!

You know it takes 21 days for a chick to hatch, right? So one day, about day 19, I'm staring at this egg and wondering: "what's going on in there?"

By this point, I imagine the chick has developed a sense of self and is becoming aware of its condition, as far as it knows. What if this egg-bound chick's blossoming self-awareness divides into two camps: one half of its instincts are hell bent on material consumption, devouring every bit of tasty yolk as fast as it can. Unlimited growth. Drill baby drill!

The other half of my little chick's brain is starting to freak a bit. You see, this half of the brain uses its brain. After surveying the entire known universe, it's clear that this is the only yolk we have. We need to power down and conserve. Infinite growth in a finite world is literally impossible. I mean, either you understand science or you don't...right?

Both sides in this polarising conflict are making value assessments based on what they know of their world. And neither side has a clue about the impending phase change from planet egg to planet earth. So if you and I are inside this egg, how are we to make "the right" decisions?

In this mad, fossil-fuelled hockey-stick moment, are we – unwittingly – helping life to crack through some sort of existential shell? Or should we all be developing a taste for doughnut economics and decluttering our low-impact lifestyles so they are fit to last the next thousand years?

The chicken-in-the-egg story is a perfectly valid way to feel our way into a mystery that seems to be unfolding right now. And actually, it's ok that we don't know the answer because we should and could have little idea about emergent phenomena at a scale beyond our own capacities.

But, as is so often the case, a satisfying conclusion opens the door to another question.

If humans are in some sort of larval development stage, and we can't know what meta-scale transformations life may be urging us toward, why should we bother worrying about choices and consequences?

If some metamorphic *deus ex machina* has already decided our destiny, wouldn't random, simplistic hedonism be just as morally defensible as any other action?

I think the answer here is a firm no. But expecting everyone to “be nice” is too simplistic. After all, life is full of predators and parasites, deceivers and dilettantes, marchflies and mozzies. And somehow life seems to need them all.

Perhaps life is set up in a way that ensures we’ll never “know”. Perhaps the true Dao really is the Dao that can’t be spoken.

So it’s probably wise to accept a deep sense of humility when approaching these matters.

Once that humility is firmly set at the core of our epistemologies, we might step forward with courage and consider questions of immense scale.

### ⇒ Part 3: Why does life need people?



*'Chladni Plate Demonstration' Daniel Rosenberg, Harvard Natural Sciences Lecture Demonstrations (2020)*

These are Chladni plates. The fella you see here is using a violin bow to resonate the plates: he’s introducing vibration, or frequency, to the particles...and look at what happens: the particles shift and align into standing waves of order and pattern, moving against the one-way flow of entropy.

It’s interesting how the Biblical tradition tells us that in the beginning was a word... a sound that called forth the world.

In the Vedic scripts, Om is the primordial cause that precedes all of creation.

Indigenous stories map out songlines that literally sing the world into being. And it was Darwin who suggested that human language developed from singing. According to this theory, our ancestors used song to call ever-more-elaborate social structures into reality, long before the formalities of spoken language evolved.

Step outwards a few orders of magnitude and consider the sun, emitting a long slow hum, bathing this planet with highly organised wavelengths of energy over geological timespans.

I think all this points to something about existence seems primed to form orderly structures in the presence of energetic flows. According to Jeremy Lent(2017), this is expressed in the Taoist notion of “li”.

Li is elegant alignment, like how a wood carver appreciates the grain of the wood as she finds it. And when we respect this li, we find balance and harmony.

That’s why, even if our knowledge is profoundly limited, like the chicken-in-the-egg, we can still intuit a morally aligned course of action in the world.

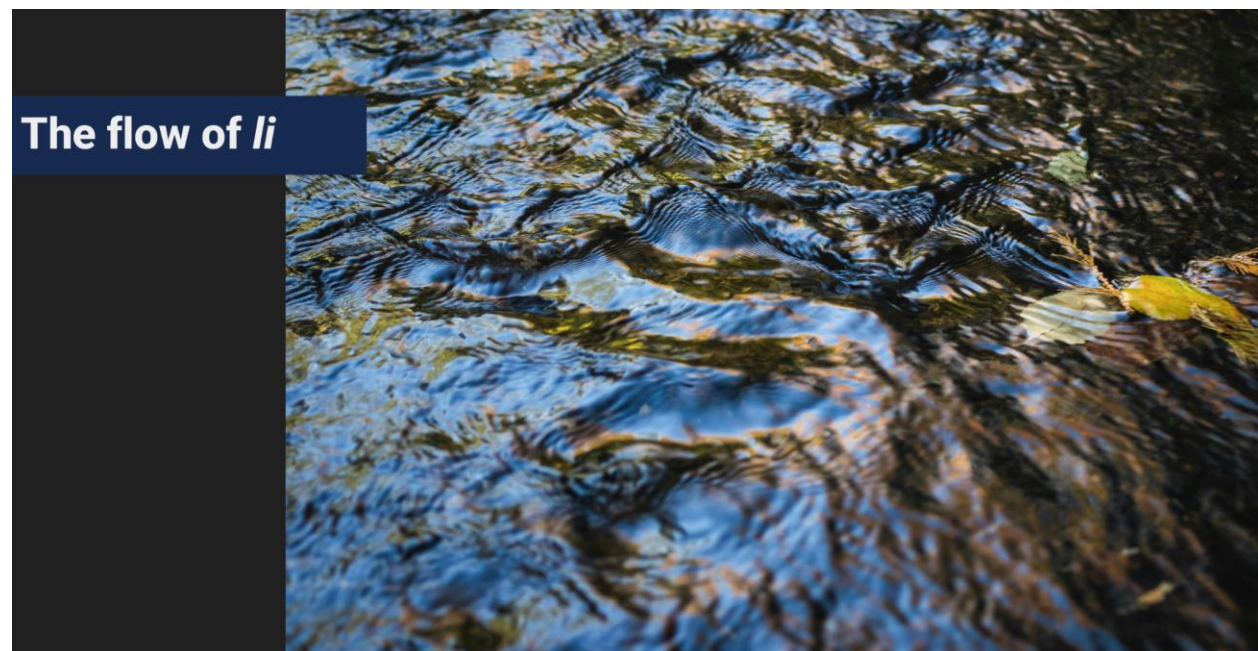


Photo by [Greg Rosenke](#) on [Unsplash](#)

Our world is full of flows<sup>7</sup>. And where energy flows we soon find oscillations, reverberatory patterns, that infer the presence of polarities...opposites....creating the field in which waves dance.

I am fascinated by these patterns, at all scales, and especially in the context of the immaterial, or liminal processes that define culture patterns, social conventions, and other forms of groupness that our species is so deeply expressive of. And in the middle of this, one polarity attracts my attention in particular: the resonance chamber between symbol and substance, between maps and territory.

Now what could all that mean? Here's a very short story that Lewis Carroll(1893) hinted at, and which was later referenced by both Luis Borges(1946) and Italo Calvino(2003).



*Chandwas, Rajasthan. Photo: the author,CC-BY-SA*

A Traveller stands gazing at a little village in a marvellous valley. It radiates vitality, neat fields, handsome, prosperous buildings, and plenty of old trees.

A local comes by. The Traveller asks: "How did this fine valley come to be?"

The local replies: "Not easily. We nearly lost it all, back in the old times."

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<sup>7</sup> Consider Thomas Nail's(2021) brilliant re-configuration of physics to really give voice to Heraclitus' intuitions!

Traveller: “What changed?”

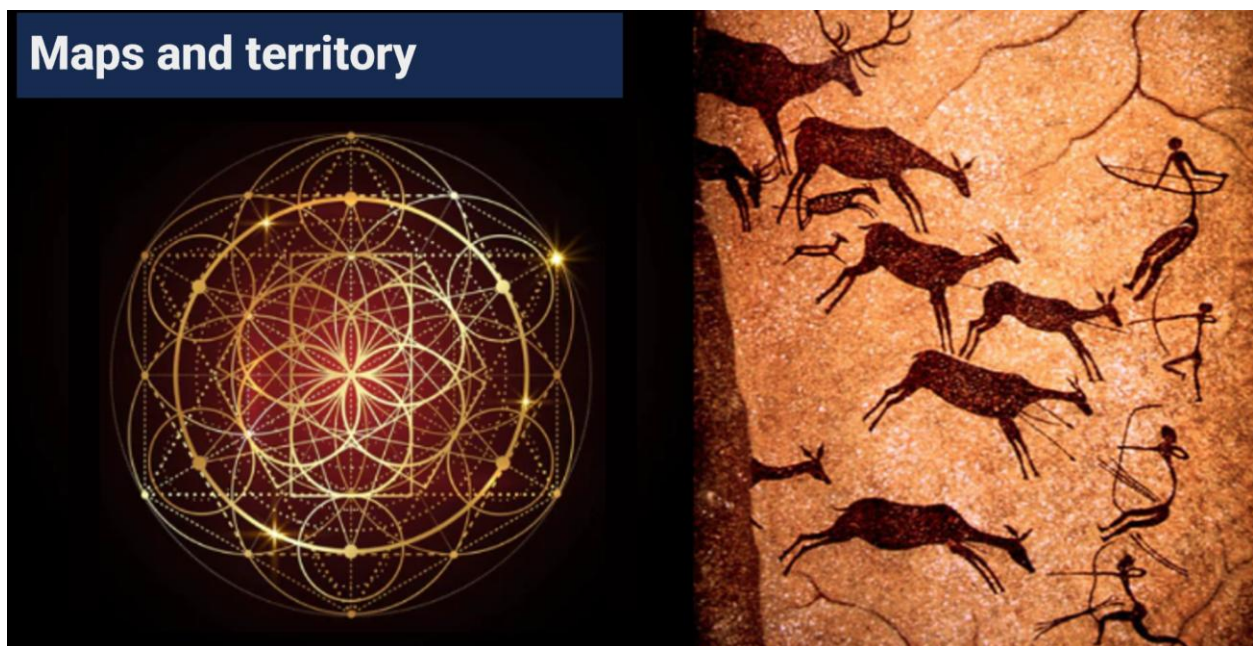
Local: “We saved ourselves by Planning. And Mapping.”

Traveller: “Really? Can I see your plans and maps now? I’d love to learn more...”

Local: “Nope, they’re all a thing of the past. See, the more we planned, the more detail we needed. At first it was really good. But eventually we needed a map that was the same size as the actual valley. It was an incredible map...mesmerizing in fact. Problem was, it blocked out the sun. The farmers complained and that was the end of it.”

Traveller: “So what kind of map do you use now?”

Local: Oh, now we just use the valley itself as our map. And I can assure you, it works just as well. Perhaps a bit better.”



Putting things on a map can be hugely empowering. Mapping is one of the most useful grammars our species has come up with. Maps are woven into every facet of our social intelligence, from the maps for a good hunt to maps of the sacred.

But Carroll’s story of the big map is equivocal. As a planning tool, maps are essential. But maps are not the territory, and they can end up obscuring as much as they reveal. Maps and territory: neither modality is complete, both are valid.

## Generative question > partial truths

I suggest what we need here is a generative question. Something that we can ask over and over again from multiple perspectives and receive guidance suited to our moment: in the way that Arjuna's faith was sufficient to carry him forward in his moments of crisis. So here's a suggestion. Consider the question: "Why does life need people?"

Why does life need people?

The answers you come up with, the clarifying questions you ask in return, the debates, the fresh new metaphors...all these contemplations – where this question at the core – all these are in the correct order of magnitude for us to meditate upon<sup>8</sup>.

Why does life need people? In a society where this question is the opening premise of what moon shots we take, what sacrifices we bear, and what lines we won't cross, I believe we will experience a more remarkable journey, both individually and collectively. In a culture where this question is central to positionality, I am certain we will find a more sure way to flow with the *li* of our destiny.



Photo by [Jonathan Diemel](#) on [Unsplash](#)

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<sup>8</sup> The future is likely to be encountered along many small paths, not a single uniting ideology. Capital is probably the last "grand unifying theory" before all that cooperative structure collapses in upon itself. In the process of collapse, and in the aftermath, we might do well to adopt small network strategies. For more, see *At Work in the Ruins* (Hine 2024)

I'd like wrap up, strangely enough, with a few reflections on weeds and ferals. Simple question: they are just fellow creatures, these "foreign" plants and animals...they are just doing what they do...so why don't we love them? Why don't we appreciate them for their own value, as fellow travellers?

There's an economic dimension of course: farmers and land managers resent the loss of coin; and there's the conservation factor: these foreign newcomers are disrupting the unique character of this place, driving the incumbent residents out of business and speaking foreign languages...I am talking about weeds and ferals here...of course.

Seriously, there is a lot of self-loathing when I look at my paddock full of giant rat's tail grass or the local wetland choked with hymenachne...and don't even start with the pigs and camels and cane toads.

On reflection though, I think we are obligated to make room for everyone. Colonisation is a way of being in the world: it's a modality expressed by cancer cells and corals, honeybees, slime molds, plague viruses and Zionists. It's not our job to police the polarities. If we were designers of healthy ecosystems, we'd have to include colonising weeds.

See, the world will never be 100% old growth forests or peak functioning savannas: vulcanism, climate, and tectonic drift ensure that every environment, terrestrial, atmospheric, and marine, is in a state of flux. Wipe-outs will occur. Old stabilities will collapse.

Weeds behave like greedy narcissists: they aren't burdened with long-term plans or worried about consequences...weeds just go for it. And their talent for insular self-interest makes them ideal first responders, re-establishing biological function where nothing else can survive.

In fragile, broken, or senescent landscapes weeds and foreign colonisers will proliferate. They may even come to dominate. But, in the course of time, conditions will change again. The stability that the weeds themselves helped to create begins to favour creatures with longer-term strategies, more complex patterns of cooperation.

In time, the dominance of the weeds will give way, making room for successor entities, and their successors, and onwards until we are finally sitting in the presence of that 400 year old river red gum, marvelling at the wisdom expressed not just by this one ancient

being, but by the whole interconnected fabric of mycelium, marsupials, magpies, and meandering creekline.

And in that moment of wonder, we can also let it go. All this will die, decay, and fade away<sup>9</sup>. Weeds will appear.

It's not our job to hold things in stasis, in a permanence that suits our cravings for material security. We live in a state of reverberation. The past opens and constrains possibilities for the now. I can't choose to *not* be descended from my colonial past.

I can, however, choose to live in reverence of something more worthy than a paperclip maximiser.

And perhaps I can place my actions into the service of the question: why does life need people.

So now let's go forward in grace with our plantings and our many purposes. And let's leave our human nature to unfold according to its destiny: you and I will remain infinite, as we are.

You have been wonderful...thank you.



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<sup>9</sup> *Die Wise*(Jenkinson 2015) is a provocative and useful guide to engaging with the Western mind's deep discomfort with death and finding our way past that to a more enduring and contented view of life.

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**Frontispiece: Harlequin Shrimp**, [Christian Gloor](#) from Wakatobi Dive Resort, Indonesia;  
**Biophysics of computation**, Wassily Kandinsky, Schwere Rot (Heavy Red), (1924);  
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