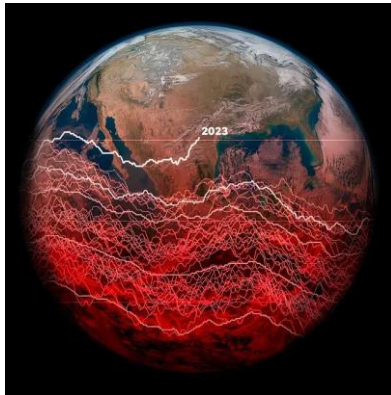


Our Inner Limits – BONUS – ADDENDUM IX

Bart Flos

OUR INNER LIMITS



BONUS – Addendum IX

**The Next Step:
Collapse Awareness**



The Next Step: Collapse Awareness

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BONUS – ADDENDUM IX

The Next Step: Collapse Awareness

BART FLOS



The Next Step: Collapse Awareness

Previously published by Bart Flos:

Het anti-klaagboek

Het anti-sleurboek

Het perfecte project

De kenniskermis

Vooruitkijken voor gevorderden

De mens als grens ('Our Inner Limits')

As addenda to 'De mens als grens':

Addendum I – Het begin van het einde: onwetendheid

Addendum II – De frontale confrontatie: klimaatverandering

Addendum III – Het grote probleem: overconsumptie

Addendum IV – Het laatste taboe: ineenstorting

As addenda to 'Our Inner Limits':

Addendum V – The Beginning of The End: Ignorance

Addendum VI – De Frontal Confrontation: Climate Change

Addendum VII – The Big Problem: Overconsumption

Addendum VIII – The Final Taboo: Collapse

Addendum IX – BONUS - The Next Step: Collapse Awareness

Addendum X – BONUS - The Last Resort: Collapse Acceptance

Addendum XI – BONUS - The Tough Choice: Collapse Resilience

Self-knowledge is the first step to adulthood.

Jane Austen

*Civilization begins with order, grows with freedom, and dies
with chaos.*

Will Durant

*We are only allowed to live on this planet as long as we treat
all of nature with compassion and intelligence.*

Aldous Huxley

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The Next Step: Collapse Awareness

Introduction

In 2015 I published my fifth book, *Vooruitkijken voor gevorderden – Hoop voor de toekomst van mensaap en moederplaneet* ('Futurology for Fanatics – Hope for the Future of Man Ape and Mother Planet'). It is an easy-to-read book with the same design as its predecessor *De kenniskermis – Overleven in een zee van informatie* ('The Knowledge Fair – How to Survive in an Ocean of Information'). Short chapters of approximately 800 words, provided with QR codes and TED(x) talks, nice pictures and numerous references to other interesting books.

In *Futurology for Fanatics*, I not only discuss humanity's major problems, but I also provide hopeful solutions. By (daring to) look ahead 100, 1.000 and even 10.000 years, I paint a picture of the limitless possibilities that Homo sapiens has to shape its own future. The final goal? Preserving our planet to prepare it as a home base for the exploration of the cosmos.

I still remember someone calling me a 'naive idealist' then. I defended this fiercely at the time and replied that I preferred to call myself an 'incurable optimist'. "Yeah, yeah," was the response, "Dream on." But it really was true, I was sitting on a comfortable pink cloud and I was looking through rose-colored glasses, which turned out to be a cold, metal telephoto lens and microscope. It wasn't until I got into my helicopter, flew as high as I could and started looking down that the scales fell from my eyes.

Fast forward to 2022

Since the publication of *Futurology for Fanatics* more than half a billion people have been added to the population, we have emitted another 285 gigatons of CO₂ and the atmospheric CO₂-level has risen from 400 to 418 ppm. That has categorically transformed me from an incorrigible optimist to a 'confrontealst', someone who confronts those around him head-on with hard science, with observation, research, facts and evidence.

My own research over the past two years has led me to write my sixth book, my Magnus Opus, which brings together all my previous work. *De mens als grens – Over de onbuigzame barrières van ons bestaan* ('Our Inner Limits – On the Unbending Barriers of Being') is much less hopeful as a plea, unfortunately, but it still contains solutions. These are now the last solutions we have left.

I'm sorry that this time I don't share hopeful dreams about the human species, which first preserves its planet and then seeks refuge among the stars. But it is time that we recognize, acknowledge and confess what we are: social group primates and hunter-gatherers, who are extremely proficient at surviving and reproducing. At the expense of everything and everyone. It's the nature of the beast.

Fast forward to 2024

When I delivered the final manuscript of *Our Inner Limits* to my publisher in October 2022, I could not have imagined how quickly things would get so much worse. The year 2023 is the year that we passed the 'elbow' of the exponential curve. This means that from now on, events affecting the environment,

biodiversity and climate will no longer follow a relatively linear path, but a chaotic, completely unpredictable one.

Since the publication of my sixth book, I have written almost 1.000 posts on *LinkedIn*, about 60 per month, 2 every day. In order not to let them go to waste in the endless timelines, I have included them in eleven addenda to *Our Inner Limits*: four in Dutch and seven in English. In these addenda I'm taking you on that accelerating path of decline as we embark on a journey from ignorance to climate change to overconsumption and collapse.

I would have liked to tell you something different, but it's not 2015 anymore. It is no longer 1970 either, when we could still do something. Or 1990, pretty much humanity's last chance to avoid collapse. I was forced to give up the 'hopeful future of man ape and mother planet'. In turn, I hope you'll stick with it to work your way through the addenda, because it's a story that needs to be told. Science, truth and reality now tell us that we have actually waited too long. It is too late. Collapse is now locked into the system.

With these eleven addenda, I hope to arm you not only with facts and evidence and the latest insights from the scientific community. I especially hope that it will make you and your loved ones more collapse aware and resilient to what is coming. Because our future is no longer a few hundred years away, or in the next century, or at the end of this century, or in 2070 or 2050. Our future takes place in the next ten years.

To conclude, I don't think it would be prudent to wish you 'much reading pleasure'. I wish you lots of wisdom and strength instead.

Our Inner Limits - BONUS - ADDENDUM IX

The Next Step: Collapse Awareness

About this book

The great thing about writing a post on *LinkedIn* is that, even more so than on Twitter and unlike Facebook, you are forced to limit your message to about 500 words (3.000 characters) for a post and about 200 words (1.250 characters) for a comment. *Schrijven is schrappen* ('To write is to delete' – thank you Simon Carmiggelt) is, as it were, enforced here, accurate to the very punctuation mark and that is good. Because it forces authors to shorten the message to a length that should be manageable even for the hurried, overloaded, *I'm-very-busy*-reader, without losing sight of the core message.

This book is an addendum, a supplement to my sixth book *Our Inner Limits*. There are a total of eleven addenda, four in Dutch and seven in English. The English addenda are not direct translations of the Dutch addenda. On *LinkedIn* I often respond to English posts in English. Sometimes I translate them into Dutch, but they also stand alone. The same applies the other way around: sometimes I translate a Dutch post into English, sometimes I do not. So, if you speak the English language – and who doesn't in the Netherlands? – and if you want to be completely informed, read all eleven. (If you don't master the Dutch language, I'm glad I am able to offer you seven English addenda. The gist of my message is just the same).

At an average reading speed of about 250 words per minute, each subchapter in this book will only take you a few minutes. So, I would like to say: do you have a little less time now? Then choose a few chapter titles that appeal to you and spend ten or fifteen minutes on them. Each post stands alone and all I did was put them into a book template and made sure that the information I referenced and responded to was not lost. So, you can pick up the addenda and

put them away whenever you want. In any case, it is best to take in the information in steps. I wouldn't want you to be overwhelmed.

Because the addenda are published as PDF books, the website links remain active. So, you can step out and take a trip to related information elsewhere and look for further depth there. In addition, you can find more links and information that apply generically in the appendices.

Each of the eleven addenda is the size of an average management book, between 30.000 and 40.000 words. The layout is like a complete book, so if you prefer to read on paper, you can easily submit the PDF as a print file to a print shop and voilà, you have a physical book in your hands, *easy peasy*.

The almost thousand posts were written from October 2022 through March 2024. All posts are presented in more or less chronological order and even though I present them in the form of a book, it is still a relatively loose collection of stories, insights and reflections. So don't be surprised by repetition and progressive insight. For a more structured foundation of my view on the coexistence and collaborating of the human species, I recommend that you read my book first or check out the website, which acts as a management summary to my book.

Each addendum is classified into 11 fixed chapters:

1. *The frontal confrontation*
2. *The collapse*
3. *Economy versus ecology*
4. *The Almighty Algorithm*
5. *Distraction, deception, doubt and deceit.*

6. *The climate collision*
7. *About climate stupidity*
8. *Looking down from above*
9. *Pollution, waste and destruction*
10. *Global consultation doesn't work*
11. *Science, truth and reality*

Please note: not all chapters appear equally in all addenda.

If you've worked your way through all eleven books, you'll have taken a journey from ignorance to climate change to overconsumption, collapse and acceptance. Not all journeys are equally enjoyable to make and this journey is one of the beginning of the end, of frontal confrontation, major existential problems and the very last, ultimate taboo: the collapse of human civilization as we know it today. That, by the way, does not necessarily mean 'the end of the world': the extinction of the human species. But it has now become a serious option indeed.

Finally: while in my book *Our Inner Limits* I leave it to the dear reader to draw their own conclusions about where the human species is going, I am much more explicit in these eleven addenda, more 'right to your face' and perhaps a bit blunt here and there. Because as a self-proclaimed *confrontealist*, I passionately believe that only a frontal confrontation with truth and reality can, perhaps, open our eyes to what is coming our way.

Good luck and success!

Bart Flos, Helmond | November 2023 – April 2024.

O u r I n n e r L i m i t s - B O N U S - A D D E N D U M I X

T h e N e x t S t e p : C o l l a p s e A w a r e n e s s

Chapter 1

Looking down from above

1.1

SM645

This is not how it works!

I read yet another brave and hopeful post following the same mode of operation: ‘Yes, we’ve made a mess of things with the environment, biodiversity and climate and all, and the situation is dire. But it’s not too late, we still have time, we can still fix this, but it requires that we all act immediately’.

This was my response:

“This is not how it works! Don’t get me wrong, it’s a good post, well authored, with apt facts and figures. But it won’t change a thing.

It’s not that we don’t see it. You must be living under a rock to not see what’s happening around the world. But that’s a suprasystemic view. It’s too big to carry on our shoulders. From a practical perspective, we don’t think that way

at all. We have supralocal concerns: protecting our investments, paying the bills, go to work and school, care and worry about health, family and friends.

The global community doesn't exist! Even the 200 countries in the world are an illusion. We are fragmented and divided into hundreds of millions of small social groups of family, household, friends, colleagues and teammates, that primarily take care of themselves first (*).

It doesn't matter if you're rich or poor, powerful or helpless, in general, we all act like that. And that's why we're all headed in the same direction: suprasystemic collapse. Because each of the 80 million specimens of Homo sapiens we add to the already 8 billion every year, thinks and acts the same: wanting to get rich, healthy, happy and grow old. It's simply unsustainable.

Collapse is now locked in. The perfect storm is coming.”

(*) I call that the Fragmentation Problem. Together with the Pronatalism Problem (**) they both hover above our main existential predicament: overshoot of overconsumption, when a population exceeds the carrying capacity of its habitat (***).

Environmental pollution, biodiversity loss and climate change are mere symptoms of overshoot. Collapse is locked in. The Fragmentation Problem and the Pronatalism Problem both render it impossible to fix our existential predicament.

In the end it all boils down to this: we were never meant to be with billions. We were meant to roam the savannas in small social groups of, say, max 25 people. The Agricultural Revolution has turned out to be our biggest mistake.

(**) Natalism (also called pronatalism or the pro-birth position) is an ideology that promotes the reproduction of human life as an important objective of being human and advocates high birthrate.

Natalism promotes childbearing and parenthood as desirable for social reasons and to ensure the continuance of humanity. Natalism in public policy typically seeks to create financial and social incentives for populations to reproduce, such as providing tax incentives that reward having and supporting children. [Source: Wikipedia]

(***) If you're interested in the concept of overshoot, see Appendix IV.

1.2

SM652

Do you feel the sheer magnitude of our problem yet?

I saw a post referring to an article debating the status quo with climate change, referring to global CO₂-emissions and global atmospheric greenhouse gas levels. It was yet another message of yes-it's-bad-we're-making-a-mess-but-it's-not-too-late-we-can-still-do-something. So, I responded in kind:

“Disturbing news indeed. I'd like to add two things though.

1 – Safe level is not 350 ppm.

Over the last 800.000 years the atmospheric CO₂-level has been going up and down between roughly 200 and 300 ppm. Our safe level lies between those numbers. These 800.000 years were divided into roughly 8 cycles of 100.000 years each, in which both the atmospheric CO₂-level and the average global surface temperature went up and down.

(The average global surface temperature varied between roughly 10 and 15 degrees C).

We, the species *Homo sapiens*, entered the biosphere about 300.000 years ago. We were able to survive, procreate and evolve because of these relatively stable and safe numbers. A cycle of 1.000 centuries is more than enough time for a

species to adjust. However, we have raised the CO₂-level by 50% in just 1 century! That's 1.000 times faster than ever before. A species cannot adapt to that level of acceleration.

2 – *Our measure of degree is wrong*

We should stop measuring the progress and 'successes of our climate change actions based on CO₂-emissions or global average surface temperature. The first is the cause, the latter the consequence. We should, instead, only atmospheric CO₂-level as the ultimate driver of global warming, if needed combined with the global average surface temperature and the Earth's energy imbalance. If those 'Global Warming KPI's' don't go down, we have failed our mission to mitigate climate change. Currently, the angle of ascent is increasing, in other words, the rise of atmospheric CO₂-level is accelerating, so is the average surface temperature and the energy imbalance.

I would suggest to the participants of the COP28 to focus solely on the following climate change mitigation strategy, with global atmospheric CO₂-levels as an example:

– *Baseline: status quo.*

Current level is 420 ppm and rising with 2-3 ppm each year, reaching the 500-ppm marker somewhere around 2050.

– *First order of business: level out the ascent.*

When must we reach the 'level out point' and how long will the 'plateau phase' be?

– *Second order of business: manage the descent.*

What level of decline is the target to reach the ultimate goal of 300 ppm or lower?

To achieve that we must, of course, stop adding additional CO₂ to the atmosphere, currently about 100 million tons daily from fossil fuels and industry alone.

And to conclude:

— If we want to bring the atmospheric CO₂-level back to 300 ppm in 2050, the reduction rate is 4 to 5 ppm each year, twice as much as we are raising it to date. That is the minimum target, if we want to avoid suprasystemic collapse.

— If we're hesitant and want to bring the atmospheric CO₂-level back to 300 ppm by 2100, the reduction rate is 1 to 2 ppm each year, slightly less than we put in to date. But then we probably won't be able to avoid global societal collapse.

Please note: any kind of carbon capture technology is a delusion. We would have to remove and store 100 gigaton of CO₂ per year for 25 years straight. That's impossible. Instead, we must stop emitting CO₂ all together and let our planet absorb, rotate and recycle it as it did for many millions of years.

Now, I ask you: do you feel it, the sheer magnitude of our problem yet?"

1.3

SM656

A proposal for a new set of global warming KPI's

Perhaps we should rethink the way we communicate about accelerated global warming, especially where it pertains to our perception of 'global average surface temperature'. Allow me to explain.

1 – '1,5C of global warming' is abstract

Not in terms of science. We can measure global average surface temperature quite adequately and precisely. But it is a combination of land surface and ocean surface temperature. Land heats up way more quickly than water, so the differences are enormous. The global average ocean surface temperature is still below 1C, but global average land surface temperature is already 2C to 3C (and the arctic region is heating up to five times as fast as the overall average).

2 – '1,5C of global warming' is less suitable

People in general don't understand what that figure actually means. It is global warming with reference to 'preindustrial levels', but it also refers to the average global temperature on earth, being about 15C, before we started heating it up. When we say '1,5C of global warming' we therefor actually say 'the global average temperature on Earth has risen from 15C to 16,5C'

Be that as it may, people in general don't see that as 'bad' per se. It's sounds like 'a little', like 'what the heck are fussing about?'

My conclusion: for practical purposes we should not use temperature as the primary unit of measure. So, what do I propose as alternative?

Well, actually, I would suggest we use two new Global Warming KPI's (GWKPI) to measure the effectiveness of our mitigation strategy, but still keep global average surface temperature in there, because of its significance to the concept as such, you know, *global wárming* and all. It's got to have something to do with temperature, right?

Here we go:

1 – GWKPI1 – Earth Energy Imbalance

The sun sends us heat in the form of radiation. Our atmosphere absorbs and/or reflects that heat. When the atmosphere absorbs more heat than it reflects, it heats up. It's really that simple.

2 – GWKPI2 – Global average CO₂-level

I know there are more greenhouse gases, such as methane, nitrous oxide and water vapor, but CO₂ hits us more in the face.

3 – GWKPI2 – Global average surface temperature

Even though it takes somewhat more of an effort to understand what 'global warming is at 1,2C' actually means, we shouldn't still incorporate it in our trio.

For the accompanying graphs click here:

<https://www.demensalsgrens.nl/grafieken/>

Despite all of our efforts to mitigate global warming, these three values have only been going up. If they don't start to level out at some point and subsequently decline, all of our big talk about renewables is just a lot of smoke and dust.

The only question that should have been on the agenda of COP28, for everybody there, including the oil sheiks and fossil fuel lobbyists, is:

'When do you expect the Earth's energy imbalance to be restored, the CO₂-level to drop below 300 ppm and the average global surface temperature to go back down to 0,0C?'

(*) Key Performance Indicators

1.4

SM667

The Fragmentation Problem: **Why there are no solutions to our** **global problems.**

If you follow the news about the environment, biodiversity and climate, your sentiment will vary between 'we are doomed!' and 'it's not too late, we can still fix it'. Wherever you stand on the scale between those two extremes, we can all see that something serious is going on. Scientifically speaking, we now know exactly what that is and what we need to do to turn the tide.

And yet nothing really changes on a global scale. Everything appears to have only gotten a little worse at every turn. Why is that? Three examples:

1 – The environment

Microplastics and PFAS molecules have now been found everywhere on Earth, even at the North and South Poles, in the deep sea, high in the atmosphere and in our bloodstream. The cumulative effect of this type of environmental pollution threatens the health and fertility of countless species, including the human species.

2 – Biodiversity

Animal and plant species around the world are becoming extinct at a rate thousands of times higher than ever before in the history of our planet. Insects,

amphibians and mammals are disappearing at an accelerated rate, some even before we have discovered them.

3 – The climate

With the excessive emissions of greenhouse gases resulting from our wasteful way of life, we have managed to upset the natural balance our habitat: the climate is warming at an unprecedented rate. This can now be seen all around us, no place on earth remains unaffected and it is even accelerating.

These three 'problems' are in fact only symptoms of a process that we call overshoot or overconsumption: when a population exceeds the carrying capacity of its habitat. That is our *réal* Big Problem. Why can't we get this resolved? Why is it just getting worse?

That's because we might be able to see, recognize and explain it as one Big Problem, but there is not one Big Problem Owner. In reality, overconsumption is spread out, or fragmented, across hundreds of millions of Small Problem Owners. Everything we see as a 'global problem' falls back on hundreds of millions of small social groups of family, household, friends, colleagues and teammates, each driven by their own set of social, cultural, political and economic vested interests. The world community does not exist!

I call that *The Fragmentation Problem*.

It explains why every Big Problem, every attempt to prevent our own demise, is splintered time and time again across hundreds of millions of small, local self-interests. And that is why nothing changes at all on a global scale. You cannot solve a big global problem with hundreds of millions of small problem owners. And if a problem has no solution, then it is not a problem; it's a fact.

PS I sometimes jokingly call the Fragmentation Problem the 'WHOOPS', the 'World's Horrifically Overwhelming Overarching Problem (Shit)'. In an overarching sense, it even transcends the problem of overshoot or overconsumption:

- *If we can't solve the WHOOPS, then we can't solve overconsumption.*
- *If we can't solve overconsumption, we can't solve environmental pollution, biodiversity loss and climate change.*
- *If we can't solve environmental pollution, biodiversity loss and climate change, we can't prevent our own extinction in the long term.*
- *If we can't prevent our own extinction in the long term, then what's the point of it all?*

Whoops.

1.5

SM673

A question of conscience for all of us

Since the publication of my 6th book *De mens als grens* ('Our Inner Limits') in December 2022, I have authored almost 700 posts about the accelerated deterioration of the environment, biodiversity and climate on the one hand and the exponential development of artificial intelligence on the other. Of course, LinkedIn's Almighty Algorithm discovered this a long time ago and now I only see posts (and advertisements) about that. That's just how social media works.

Recently there was a post from a tech geek, an enthusiastic, fanatical and passionate supporter of artificial intelligence (AI). This time his post included a number of recommendations of AI apps that 'make you smarter'. Now I regularly write about AI and anyone who follows me will know what I think about it. AI apps like ChatGPT don't make us smarter, they make us dumber. The more AI we use, the more we squander our autonomy, skill, independence, creativity and intelligence. We don't do anything ourselves anymore! We just ask the AI to do it for us. It makes us lazy, self-righteous and short-sighted.

So, I told him that in a comment and a repost. To be clear: I always remain polite, at least polite without being vague, hypocritical and slimy. But it is head-on confrontational, yes, but intended to engage in rational discourse. So, what do you think happened? BAM! Everything gone. My comment, the discussion with others about this, my repost with comments, everything gone. The person in question had blocked me without even starting the debate.

Before you accuse me of hypocrisy: yes, I do that too, blocking. When I'm being chased by climate trolls and bullies who insult, threaten and ridicule me personally, I block them. It purges the timeline, everything disappears, the person in question is not notified and it really feels like a cleansing as soon as you press the 'BLOCK' button. Brilliant.

Is it? Brilliant? Because it's so easy. It avoids confrontation, it inhibits rational discourse and we all reside in our own truth silos and echo chambers, surrounded only by like-minded people. I block climate trolls because they are threatening to me, this AI fanatic blocked me because he thought I was threatening to him (which is what we think nowadays when we receive even the slightest criticism) and so everything remains the same.

This is the question of conscience that I would like to ask the dear reader: is this the world we want to live in? That we block each other until we are all convinced, safe in our echo chambers, surrounded by like-minded people, that we have a monopoly on the truth and no longer even discuss it with each other?

I'm just asking. What do you think about this?

1.6

SM695

To all do-gooders and world improvers

The climate conference in Dubai, the COP28, is over and, as befits a polarized debate, opinions range from a 'great triumph' and a 'unique achievement' (the oil states and the fossil fuel lobbyists') to a 'huge disappointment' and a 'complete failure' (all others). There is constant talk about 'the elephant in the room' and let me make it clear again here: No COP has ever changed the global atmospheric greenhouse gas levels, the Earth's energy imbalance, and the average global surface temperature compared to pre-industrial levels.

And that's why this post is for anyone with a brilliant plan to save the environment, biodiversity and climate, and thus prevent us as a human species from making our own environment unlivable (which, if you think about it, is the most idiotic thing one can do). From now on, the same universal criteria apply to everyone who is involved in renewables, DeGrowth and 'green energy', in order to measure their own success and also test it at a global level.

These are the three global measurement criteria:

- 1 – *The atmospheric CO₂ levels*
- 2 – *The energy imbalance*
- 3 – *The average surface temperature*

For all the do-gooders and world improvers among us, from now on you will only be successful if you can say this:

The Next Step: Collapse Awareness

'Look people, look what we've done! We scaled our efforts to global levels and lo and behold, it is now 2035 and:

1 – We have reduced global atmospheric CO₂ levels from 420 to 390 ppm, further aiming for 290 ppm by 2050.

2 – We have corrected the energy imbalance on Earth from 1.5 Watt per m² to 1 W/m², further aiming for -0.5 W/m² by 2050.

3 – We have reduced the average global surface temperature from +1.2C above pre-industrial levels to +0.8C, further aiming for +/- 0.0C by 2050.”

If that is indeed the case in 10 years from now, I will fall to my knees, sing and cheer. If we have indeed achieved that in global collaboration and are able to push it through to 2050 without beating each other's brains out, then I will say "yes, all those climate books, reports, analyzes and conferences have had their usefulness and we have actually done what we said we were going to do." My faith in humanity will then be restored and I will cheer, party and toast to a sunny and green future for all people on earth.

But! If these values reach 450 ppm, 2.5 W/m² and 1.5C respectively by 2035, then we have failed miserably. Then we have utterly failed to transcend the nature of the beast and we will have to suffer our fate: suprasystemic collapse with all its dire consequences. In fact, in that case we no longer deserve the designation Homo sapiens, 'the wise, thinking, modern man', but we are all relegated to Homo infantilicus.

And now quit your stalling: get cracking already!

1.7

SM713

Letter to a fan

When I write about environmental pollution, biodiversity loss and climate change, not all the responses are sunshine and rainbows. And yes, that might be the understatement of the millennium. I receive a lot of criticism and when that is of a constructive nature, I have no problem with it at all. I love a good (semantic) fight and don't shy away from a passionate exchange of views, as long as it remains civil.

But more than often I am 'chopped off at the ankle level' (Dutch expression) for deviating just the tiniest of bits from the *communis opinio*. It is 'warp and weft' (another Dutch expression for you) on the social media that people respond from within their own echo chambers, surrounded by peers that agree with everything they say and afraid to lose faith with their base. Every once in a while, it gets ugly só fast that I have to block them. Ad hominem attacks I don't accept and the more aggressive it gets the faster I block.

Be that as it may, I have my fan base too. So, when I received a direct message complimenting me on my work, I was flattered and responded in kind. This is what I wrote:

“Thank you for your interest and compliments.

Since the publication of my 6th book, I have written more than 800 posts about ignorance, the climate, overconsumption and collapse. I have published them

in 10 addenda; 4 in Dutch and 6 in English, to be downloaded as printable pdf-books from my website for free. I didn't want my posts to disappear into the endless timelines of LinkedIn. My transformation from incorrigible optimist (in 2015, at the time of the publication of my 5th, more hopeful book) to 'confrontealst' (in December 2022, at the time of the publication of my 6th book) is described in the ten addenda.

It has been liberating to be collapse aware. My emotions range from inner resignation to existential frustration (that the human species is squandering its unique qualities), so, my emotions are not 'personally intense'. They may be 'existentially intense'. I know what's coming. It's good to be prepared for that. Not in the sense of a being a 'prepper', but in the sense of mental preparation. Because most of us have no idea what awaits us.

I don't write to scare people. I write it down and hope that I reach someone here and there who is able to become more resilient (and hopefully at the same time make their offspring more resilient). We find ourselves in totally unique times, since we've passed the elbow of the exponential curve. The *vitosphere* (*), our habitat or living environment has entered a state of cascade failure, the precursor to suprasystemic collapse. We think that can't happen to us, but it has already been set in motion and it cannot be stopped any more.

But I'm not just talking about doom and destruction. No one would invite me to their parties anymore hahaha. I withdraw more into my small social groups of family, relatives and friends. I am increasingly able to discuss trivial topics and engage in casual conversations, instead of playing the 'doomsday prophet' all the time. Ultimately, what's left for me to do is write about it (I am an author after all), do stand-up comedy about it (the second-best outlet) and compose

and arrange music about it as a jazz musician, arranger and composer (the best outlet).

Although I could not have expected that I would experience suprasystemic collapse in my lifetime, I have now made peace with it. The exponential decline will further accelerate in the next ten years, there is nothing that can be done about it. And it will take unprecedented ugly forms.

There will be plenty of intense emotions to come. When humanity realizes that we are beyond redemption, the final convulsion will not be one of global unification, but of fundamental division. The ugliest traits of the human species will manifest themselves and our environment will be completely indifferent to them. Our habitat is looking for a new equilibrium and whether we will still be part of it depends on chance and chaos, and no longer on our active intervention.

These insights have developed in me over the past ten years. So, I'm not just spit-balling or fearmongering for the sake of fearmongering. My views don't stem from gut feelings and they are not born from paranoia conspiracy theories. They are based on solid science, to which I add my own unique perspective as an individual. I just fear that the scientific community is not yet ready to admit that it is too late, that we have waited too long (with some exceptions, see Hansen e.a.).

From now on, world events will not follow a relatively linear path of deterioration, but a completely unpredictable and chaotic path. But we will continue to deny it, to protest it, to want it to go away, to combat it (and we will continue to consume) until the very bitter end.

It may be strange to end my monologue with this, but I am very curious, inquisitive, highly interested in how this process will unfold. Extreme weather and climate disasters will accelerate in frequency and intensity, become fiercer, more destructive and last longer. Some of the most extreme weather phenomenon and some of the most extreme climate disasters will occur every season, every year, every quarter, then every month, every week and even every day. That's what word 'ruthless' means. Suprasystemic collapse is ugly, it's brutal. Our living environment, planet Earth, it's completely indifferent about our feelings.

So, there you go. I believe that when the wise Chinese said 'may you live in interesting times' it was not meant as a blessing, but as a curse. It looks like the man is going to be right.

Duly noted. I look forward to hearing from you again.

Cheers”.

(*) The *vitosphere* encapsulates the familiar surface conditions of Earth resulting from a complex interaction of *atmosphere* (air, clouds), *hydrosphere* (oceans, rivers, lakes), *lithosphere* (land, rocks), *cryosphere* (ice, snow) and *biosphere* (plants, animals - including humans) with the incoming solar radiation.”

1.8

SM729

Letter to a hopeful citizen

Dear fellow human being,

I can understand that a lot of hope is derived from the development and deployment of renewables technology. With all the nastiness of extreme weather and climate disasters washing over the planet in increasing frequency and intensity, we need something to provide us with a sense of purpose, a sense of direction and a sense of urgency. But I strongly believe that we have to face the music. Because all that time and energy, all that capital that is currently being spent on renewables technology, that 'brave green new world', doesn't have any effect on the global rise of atmospheric greenhouse gases, average surface temperature and the Earth's energy imbalance. Those global warming KPI's just keep going up. Our time and energy could better be spent on collapse *awareness, resilience and acceptance*.

In my book *De mens als grens* ('Our Inner Limits') I apply *the kinship circle* as scaffolding for my story.

The individual stands at the center, a series of overlapping circles. Everything literally revolves around the individual. We all die alone. Around the circle of the individual, you can draw the circle of *the small group* of family, friends, colleagues and teammates. When everything around us collapses, both mentally and physically, we retreat into our small social groups.

The circle of our small social groups is surrounded by *the large group*: our organizations, companies, corporations, cooperatives and multinationals. That circle is surrounded by the circle of *the small society*: our street, neighborhood, district, village, city, province. Around the circle of the small society stands *the large society*: country, state, continent, which is in its turn surrounded by *the suprasystem*: planet earth with human civilization as the dominant species, all eight billion of us. The final circle represents *the cosmos*: solar system, galaxy, star clusters, universe, multiverse.

Well, reasoning from the outside in:

- *The cosmos makes everything relative. Relative to the cosmos, everything is both useful and useless. The cosmos is completely indifferent to our fate and too abstract a concept applied to our daily lives.*
- *The suprasystem is everything to us. It is our living environment. But she is also completely indifferent about our feelings. When the earth seeks a new equilibrium, she won be interested in or concerned about us at all.*
- *The large group completely dominates us, distracts us and destroys us. It keeps us working all our lives, so we can buy more and more stuff. It blinds us and dulls us. But we cannot do without it, at least not in the current neoliberal, capitalist, consumerist, growth economic free market model.*
- *The small group is what everything ultimately revolves around. That's where we retreat when everything collapses, that's where we look for comfort. Without a small group, we are nowhere and nothing. And that brings us back to the individual.*

The journey that I take the reader on in *Our Inner Limits* is one of frontal confrontation. Because although forms of empathy and altruism can be found at the individual, local and even regional level, they vanish like snow before the sun at the level of the large group and further out. Because as a human species we are far from empathetic and altruistic. On the global level we are, on average, closed-minded, self-centered and short-sighted. At that level we are in fact a 'suicidal species', which is a contradiction in terms in and of itself. Why else would we keep exceeding the carrying capacity of our habitat to the level of cascade failure and suprasystemic collapse?

We need to learn the truth and reality of collapse awareness, resilience and acceptance, in order to cope with our fate, which is now locked in: suprasystemic collapse. But before we can accept that, we must first abandon all hope of recovery. It's false hope, brought by false prophets. I'll give it to you straight: it's too late, we've waited too long. We've had our chance and blew it. We must confront ourselves head-on with truth and reality. That's the kind of 'confrontealism' I practice and that's why I call myself a 'confrontealist'. Because only a frontal confrontation with reality might open our eyes for what's coming our way.

With kind and always humanly limited regards,
Bart Flos

O u r I n n e r L i m i t s - B O N U S - A D D E N D U M I X

T h e N e x t S t e p : C o l l a p s e A w a r e n e s s

Chapter 2

The frontal confrontation

2.1

SM646

How many options do we have left?

I was asked to specify what options we have so fix our existential predicament with the environment, the biodiversity and the climate. This was my response:

“There are only two options left. And no, there isn’t a third one. Not anymore. We’ve waited too long. It’s too late. There, I said it.

— *Option 1*

If we could find a way to reverse the 1% global population growth (bringing us from 8 to 10 billion people in 2050) to 1% decline, we would reach 6 billion people in 2050 (a good start) and 1,3 billion by the end of the century (the ideal number).

— *Option 2*

Become resilient ourselves and teach our children to become resilient.

- *Go on hiking trips. Start with 10 km. Give them a backpack of 10 kg.*
- *Try to live without electricity, gas and water for a week with the entire family.*
- *Cherish your loved ones whilst they're still around. Cherish your possessions while you still have them.*
- *Be respectful and accept each other's opinion. But stop fooling yourself.*

This generation will see the beginning of the end, our children will live on the edge of hell and our grandchildren will inherit a world devoid of prosperity and wellbeing. Societal collapse will not necessarily lead to the extinction of humankind. For that we need a novel virus of some kind, currently thawing out of the permafrost. But we will all go back to the beginning of the 19th century.

Option 1 is not really an option. Option 2 on the other hand is almost like a command: *'Thou shalt become resilient and thou shalt teach thy children to become resilient'*. (I am not religious: I am an anti-theist, but the reference seems apt).

Population decline can only occur through collapse. Here are four options:

1. *A virus with the infectivity of the measles and the mortality of Ebola*
2. *Nuclear war,*
3. *A meteorite strike*
4. *Societal collapse as a result of overshoot.*

There is no such thing as 'voluntary population decline'. Overshoot as the overarching issue is only overshadowed by two other generic issues: (The Fragmentation Problem (FP) and The Pronatalism Problem (PP)).

The Fragmentation Problem dictates that the Global Community doesn't exist. The 200 countries of the world don't exist either. We're all fragmented into hundreds of millions of small social groups of family, household, friends, colleagues and teammates who care about themselves first ('supra-locality'). The Fragmentation Problem transcends every other global issue.

The Pronatalism Problem, being the ideology that promotes the reproduction of human life as an important objective of being human, advocating high birthrate, dictates that we will keep reproducing until we reach 10 billion people in 2050.

We have a tendency to assume that we can solve all of our problems through global collaboration. Sometimes we do, but only if it serves the purpose and interests of certain small social groups. Governments, fossil fuel conglomerates and political parties, for instance, are all led by small social groups, subsequently led by individuals that primarily take care of themselves. Every existential problem we see, whether that's environmental pollution, biodiversity loss or climate change, or overshoot in its entirety, is fragmented across hundreds of millions of small social groups, each with their own social, cultural, economic and political agenda.

The PP exacerbates all other problems, because in theory we are one unified species (*Utopia*), in practice however our very nature as a species accelerates our own demise (*Dystopia*). It's a true conundrum, the Ultimate Unsolvable Puzzle. For us there's no possible solution, but nature will provide us with one: suprasystemic collapse, leading to a new equilibrium. We might have a place in it, or not. Because planet Earth and the universe are, in the end, utterly indifferent about our fate. So, there you have it.

2.2

SM654

Asking you to draw your own conclusions

I saw a post referring to an article with various graphs of rising atmospheric CO₂, rising CO₂ emissions, rising global forest loss, rising methane emissions, rising global average temperatures and rising sea levels. Then, in the end, the article refers to the ‘soaring’ rise of wind and solar energy, the ‘extremely quick’ rise of electric vehicle sales and the ‘plummeting’ battery costs. (In the first set of graphs no such adjectives were used).

This was my response:

“Good read. But wait! Something doesn’t add up.

So, please, before you allow yourself to get hopeful, that all the sad news will be countered by good news, leaving a green, happy and healthy world of renewables in which we can all live happily ever after, I ask you this:

- *If you look at the timelines of both sets of graphs, what do you conclude in terms of correlation or even causation?*
- *If you were to overlap these graphs and match the timelines, what would you see?*
- *If you were a scientist in general or a climate scientist in particular, what would your conclusions be?*

Seriously, I'm not telling you this time, but I'm asking you to draw your own conclusions. Perhaps I can ask you a different question:

— *What is the influence of the second set of graphs on the first one?*

Just asking.

2.3

SM675

The well-known, persistent formula on the narrative of climate change

I read yet another article about our existential predicament with the environment, biodiversity and climate. It followed a well-known, persistent formula on the narrative of climate change. This was my response:

“Good read. The truth is told here. Extreme weather and climate disasters are washing over the planet, increasing in both frequency and intensity. We can all see that. But most of the news about it echoes the same message:

“Look, we’ve got a severe problem here. We’ve made a mess of things and it’s getting out of hand really fast. But it’s not too late. We can still fix this mess if we just stick together and start working the problem now”.

Do you see the persistent duality?

1 – Doom, disaster, despair, disillusion and destruction.

Immediately followed by:

2 – Hope, belief, optimism, promise and prospect.

How long do you think this duality remains credible? How long can you shout, 'Nothing to see here!' when your house is burning down to the ground? We, the human species, all 8 billion of us, we've got a Big Problem. But we're not dealing with it. Not by a long shot. Why is that? Why can't we fix a problem that we've analyzed to the bone? Why is it getting worse at every turn?

I explain it in the subchapter 'The Fragmentation Problem – Why There Are No Solutions to Our Global Problems'.

2.4

SM677

No time to mess it all up

I saw a post referring to some solid and to the point climate change research that went back in time a couple of million years. This was my response:

“Great research! However, going back millions of years might be too an abstract concept for us puny human beings.

- *The universe is 13,7 billion years old, our planet 4,5 billion years, organic life started 500 million years ago. The last common ancestor of the human species lived about 7 million years ago. We, the species Homo sapiens, emerged about 300.000 years ago.*
- *10.000 years ago, we ‘started’ the Agricultural Revolution and stopped roaming the savannas as hunter-gatherers.*
- *200 years ago, we started the Industrial Revolution, 50 years ago the Digital Revolution, 25 years ago the Internet Revolution and 1 year ago the AI Revolution.*

See what I’m getting at here? We are now with 8 billion people, rapidly multiplying to 10 billion in 2050. We have artificially raised the global atmospheric CO₂-level by 50% within 1 century, creating havoc all over the place. In the current accelerated tempo, we will go from 420 ppm in 2023 to over 500 ppm in 2050. Within only 0,007% of the age of the Earth and only 0,03% of our age as a species, we have totally messed up our habitat, on our way to supra-systemic collapse.

One way or another, our numbers will be decimated to less than 20% of what they are now, maybe even less than 5%. Isn't that marvelous?

2.5

SM683

About hope and false hope

After yet another hopeful post referring to a hopeful article filled with hopeful messages, I had to say something. Now I know, I am constantly saying something about our existential predicament and so I should. Because there is something say, something to add to the debate. And that is the global level. Because by allowing us to be distracted to the lower levels, were losing sight of the main objective.

And yes, hope isn't necessarily a sad thing. But false hope is, especially when it is delivered by false prophets. Too much hope, based on too hopeful assumptions (like 'just you wait and see, renewables technology is going to save us all, praise be!') is a bad thing. It lulls us into a false sense of security, leading to complacency, misplaced trust and inaction. In such a mental state we will not be able to become collapse aware, let alone collapse resilient, let alone reach a state of collapse acceptance.

This was my response:

“We should, and if we could, we would...’ But we don’t. We only promise and pledge. Rinse and repeat. Somehow, we are able to convince ourselves that we are making progress. But we’re not. Not by a long shot. It’s getting worse at every turn. At the only level where it counts (the global level), everything goes up and up:

– *Emissions of greenhouse gases:*

This year's (2023) CO₂-emissions of fossil fuels and industry will approach 40 gigatons. Methane emissions are up as well.

– *Global atmospheric greenhouse level:*

Increasing and accelerating. Atmospheric CO₂-level is at 420 ppm rising to 500 ppm in 2050.

– *Global average surface temperature:*

Rising and accelerating, breaking records by record numbers. The average global surface temperature in 2023 was 1,5C, the first preferable limit as set at the COP in Paris.

– *World population:*

At 8 billion people, rising with 1% each year, to 10 billion in 2050.

– *Global World Product, the sum of all GDP's:*

Around \$ 104 trillion, growing to \$ 130 trillion in 2050.

Stating that 'GHG emissions will peak' at some point sounds hopeful, but it's a dangerous distraction. Because besides the annual emissions, we must also look at cumulative emissions. To date, global cumulative CO₂-emissions are at 1.500 gigaton, rising to 2,500 in 2050. CO₂ stays airborne for thousands of years so we need to extract every molecule to get back to save levels between 200 and 300 ppm and we haven't got a clue (1) how to do that cost effectively and (2) how to do that in every practical sense.

We are lulled into a false sense of hope by staring at our belly buttons all the time. If individual, local or regional renewable initiatives don't scale up to global levels, we're not making any progress at all.

Tick-tack, tick-tack...

PS If you are inclined to utter a derogatory snort at so much pessimism, despair and doom, being distracted by all the hopeful and cheerful news about renewables development, and the rise of EV's, and new battery technologies with lower prices, and solar panels and windmills and all, then please answer me this:

If all that renewable news is indeed hopeful and cheerful, and we're going to fix everything with the environment, biodiversity and climate and all, when do you expect (1) the global atmospheric CO₂-level to drop down to below 300 ppm, (2) the average global surface temperature to drop down to 0,0C and (3) the Earth's Energy Imbalance to drop to -0,5 W/m²?

Thanks for answering.

2.6

SM701

Oh China, China, China, China, China!

Lots of news coming out of China. But there's something strange going on, because the news about China is always brought in perfectly isolated silos of information: the coal industry and its CO₂-emissions, or the accelerated pace of renewables technology development, or human rights violations, or the authoritarian dictatorship, or the intolerance towards neighboring countries (please determine for yourself whether this comes from internal or external sources). So, when I saw a hopeful message emerging from the silo 'accelerated pace of renewables technology development', I was only a little bit skeptical when I wrote:

“We might be just a tad more careful in praising a nation that is on course of being one of the most indoctrinated, suppressed and surveilled dictatorships in the world (if it not already is). We might be just a tad more critical, before we are distracted, bamboozled and impressed by all the buzz about decarbonization and electrification. Because these hopeful tales of 'positive thinking and constructive doing' mean diddly squat, if it can't be scaled up to global levels and if it doesn't change the increasing greenhouse gas emissions, global atmospheric greenhouse gas levels, global average surface temperature, GWP (the sum of all GDPs) and the world population.

It all sounds swell and dandy, but in the end it must actually mean something for all of us, all eight billion species of Homo sapiens on the only planet we've

got, where all are equal and nobody is more equal than anybody else (do you hear that, China oh China?)

Therefore, I have a message for all the do-gooders and world improvers:

https://www.linkedin.com/posts/bartflos_to-all-do-gooders-and-world-improvers-the-activity-7141411527546339328-guor?utm_source=share&utm_medium=member_ios

['To All Do-Gooders and World Improvers']

See also subchapter X in this book.

2.7

SM712

Admitting that your efforts have utterly failed is extremely difficult

After the COP28 of 2023 had come and gone, the battle about the actual outcome lingered on for a while. Comments varied from ‘a total and utter failure’ to ‘a historic and unprecedented event’, with almost nothing in between. Apparently, some people got annoyed by all the negativity surrounding the 28th attempt to fix our global existential predicament without having anything to show for it and made an attempt to ‘highlight the positive’. So, when I came across a post with exactly that message, I responded as follows:

“Dear optimist,

I appreciate what you are trying to do. You want your audience to not only focus on the negative, but also highlight more positive developments. I agree that we should all strive for that in our rational discourse. But this time it’s different. Everything is different. Please allow me to point out where you are, with all due respect, wrong and what I would suggest you should rather focus on.

1. The only ‘viewpoint’, where climate change is concerned, is the end result of the collective behavior of the human species. Individual country’s ‘viewpoints’ are irrelevant, if the end result is accelerated global warming.

2. The ‘journey we’ve taken’ since the first IPCC report in 1990 is irrelevant, in the sense that it only has gotten worse since then. On a global level progress is negative.
3. The size of the conference is irrelevant. In fact, it has no influence on the end result at all: everything has gotten worse despite the overwhelming attendance.
4. It doesn’t matter that the COP28 text says that the human species causes global warming. That is input and should not be the output. It also doesn’t matter what the COP28 ‘recognizes’. We know all this as a starting point.
5. That we need ‘rapid reductions in greenhouse gas emissions’ and that it ‘calls for a transition away from fossil fuels’ is the understatement of the century, because we know this for a century now. Don’t bring it as ‘new’ or ‘unique’ viewpoints, don’t insult our intelligence.
6. Progress is not ‘slow’; progress is negative. No COP has ever had the slightest influence on the global rise of atmospheric greenhouse gas levels, average global surface temperature and the Earth’s energy imbalance. All these values have gone up and are still going up.
7. The problem of accelerated global warming is not ‘urgently addressed’ at all. If it was, we would have seen these values going down already. The COPs have taken no steps that bring us closer to our goal; we keep moving away from it.
8. We understand the complexities, but we do not appreciate the progress, because there is none. And we certainly do not ‘keep advocating for more’, because more COPs only seem to make it worse. It makes one wonder what the added value of climate conferences is actually.

Now, before you dismiss all this as ‘negative’, I would like you to look at these graphs:

<https://www.demensalsgrens.nl/grafieken/>

What do you see? When do you expect, based on your overly positive assessment, that:

- *The global atmospheric greenhouse gas levels, currently at 420 ppm, will reach safe levels, being between 200 and 300 ppm?*
- *The global average surface temperature, currently at +1,2C compared to preindustrial levels, will reach 0,0C?*
- *The Earth's energy imbalance, currently at 1,5 W/m², will reach -0,5 W/m²?*

These are not the only values that matter, but they are the most important ones. As long as they are going up in accelerated fashion, we have failed our mission. All of us. Thanks in advance for your reply.”

Never heard from him again.

2.8

SM721

To be perfectly honest

I received the following response from someone here on LinkedIn:

“Bart, are you also going to help people deal with the situation you describe? Or do you just feel called to sound the alarm? I see that you time and again [...] draw attention to the ecological reality, but that you [...] offer little or no perspective for action. [...] This is well-intentioned feedback. I think you express an important voice in these existentially uncertain times. Personally, I think it's a shame that you limit your power to that of a prophet of despair.”

This was my response:

“Thank you for your constructive-critical feedback. I appreciate that. My response in order of appearance:

1. It's too late to 'help' people. At least when it comes to solving this existential crisis. However, I do help people: by making them more resilient, even if only mentally, to what is coming.
2. I feel called to sound the alarm, because we have no idea what is coming, what suprasystemic collapse actually entails. We are completely unprepared and we seem to approach the end game smiling and consuming. Our collective naivety is unprecedented.

3. Providing a perspective for action only makes sense if there is a reasonable chance that the action will have a positive impact on the goal to be achieved: combating overconsumption. But it's already too late for that.
4. My messages do not have to be “helpful” in the sense that they align with other false prophets. At best, they are useful for those few who are at a tipping point between being hopeful and becoming more resilient to the inevitable.
5. I am not a prophet of despair. I am not promoting distress, panic or defeatism. All I'm saying is that the hope we still have is false hope expressed by false prophets. It is 'Hopium for the people'. In my opinion it is a form of public deception.

Almost 10 years ago, in 2015, I authored my hopeful book 'Vooruitkijken voor gevorderden' ('Futurology for Fanatics'). Back then, as an 'incurable optimist' I was still in your camp. I even did a TEDx talk about it:

<https://youtu.be/bpJiUcwXHDQ?si=J-lgnQGRqWzybuha>

You would have probably found that Bart Flos more sympathetic. But that time is over. Because it's too late. We have waited too long, suprasystemic collapse is only a matter of time now. As a self-proclaimed 'confrontationalist', I have to face the facts. 'It's a lousy job, but somebody's gotta do it'.

I never thought I would experience it in my life: societal collapse. I thought we had more time. But I was wrong. Thank you again for your constructive-critical feedback. I appreciate that. But you are also familiar with these graphs and statistics, aren't you?

<https://www.demensalsgrens.nl/grafieken/>

Each of these graphs is a symptom of overshoot or overconsumption, when a population exceeds the carrying capacity of the environment. Our planet is looking for a new equilibrium and it doesn't care what feelings we have about it: hope or despair.”

I then received the following response:

"And now? When it is all so clear and final; why do you still feel the need to convince [LinkedIn] that you are right?! Completely pointless waste of time, right?!" [sic]

This was my response to that:

"Aha! See? That is the right question to ask. This is what we need to stop doing:

- *Organizing international conferences on the environment, biodiversity and climate. Because they don't change anything at all.*
- *Spreading hopeful news that technology will save us. Our technology is precisely our downfall.*
- *Increasing the electrification of society. The first thing that goes out in suprasystemic collapse is electricity. We are completely helpless without it.*
- *Thinking and saying that we will still make it, that it is not yet too late. It is. The system has taken over from us, we must resign ourselves to our fate.*

This is what we should start with:

- *Let it go. Work less, buy less. Learn to do nothing.*
- *Get rid of your smartphone, laptop, those stupid ear plugs, Netflix, that brainless staring at those stupid screens.*

— *Cherish your loved ones. Spend more time with them. Talk about what they find important. Unimportant things, local things.*

— *Freeze your consuming behavior. It doesn't have to be less, there is no point anymore, but if you can, be my guest. Enjoy what you have without needing more.*

— *Talk to others about your existential stress without adding “everything will be fine” or “technology will save us.” Also talk about the ending and how you can deal with it. Stimulate collapse awareness and resilience.*

— *Express what you appreciate in each other, why you love someone, why you enjoy being in someone's company. Do that while you still have your loved ones around you.*

Finally: we should stop fooling ourselves. We have exceeded the carrying capacity of our environment for more than 70 years and now it is enough. Planet Earth Says No. Something's gotta give.

Let us just accept that, be aware of it and prepare for it. What do you say? In or out?”

Never heard from him again.

2.9

SM740

Why bother?

I saw a post referring to an interesting and well written article in a renowned magazine, about ‘the dire situation we find ourselves in with the environment, the biodiversity and the climate and all, that we’ve made quite a mess, but that it is not too late, we can still do something, but we réally have to get together now and get on with it already’. It didn’t actually say that, but doesn’t that mantra, that adage sound all too familiar to you?

This was my response:

“I didn’t realize it when I first reacted to this post [on the 31st of December 2023], but this article was published in September of 2019. It must have had an overwhelming impact on the human population, on our awareness of what we do to our ecosystem and the environment, biodiversity and climate, yes, it really must have shaken us to the very core, because since that time we have enthusiastically and passionately:

– *Added an additional 230 gigaton of CO₂-equivalent to the atmosphere (a gigaton is 1 billion ton).*

– *Burned 155 billion barrels of oil, 34 billion metric tons of coal and 17.000 billion cubic meters of natural gas.*

– *Produced 295 million non-electrical vehicles, 1,5 billion metric tons of plastic, 8,5 billion metric tons of waste and 17 billion metric tons of cement.*

- *We have raised the global atmospheric CO₂-level from 410 to 420 ppm (preindustrial level was 280 ppm, safe level lies between 200 and 300 ppm).*
- *We have increased the Earth's energy imbalance from +1,0 to +1,5 Watts per square meter.*
- *We have raised the average global surface temperature from 1,1C to 1,2C compared to preindustrial levels.*

So, yeah, what a great impact it had on our global conscience.

Please don't get me wrong, because the article speaks truth, the author is spot on with his contemplations. Many have gone before him and came after him, authoring profound statements about our existential predicament. Over the past half century, we have produced millions of books, analysis, reports, articles, posts, reposts and comments on what a mess we are making of our living environment and how we can still fix it. We have organized countless international conferences on the environment, biodiversity and climate. Hundreds of thousands of people have flocked together to discuss our problems until all participants were blue in the face.

And all this time, all the above-mentioned global warming KPI's (Key Performance Indicators) only went up and up. In fact, they are still going up and the process as a whole is even accelerating. What the heck is wrong with us? Clearly something sinister is going on with the extreme weather and climate disasters washing over the planet in increasing frequency and intensity. This year especially it's gotten out of hand dramatically, foreboding something far worse than 'just some bad weather' or 'simply a stroke of bad luck'.

And we just keep on writing and talking about it. At this point you start to wonder, no, seriously, about the point of it all. Why bother? That's actually a

valid question to ask: if we keep producing these articles in the zillions and nothing changes about our existential predicament, then why bother?

2.10

SM741

Just to be perfectly clear

In case I haven't been clear and for all who have been following and reading me here on *LinkedIn*, this is the management summary of my 6th book, my 800 posts that followed and the eight addenda in which I captured them:

1 – It's too late.

2 – We've waited too long.

3 – There's nothing more we can do to fix the mess we've made.

4 – The current state of cascade failure will be followed by suprasystemic collapse.

5 – We must therefore become adhere to the concept of collapse awareness, resilience and acceptance.

6 – We must stop having conferences and start preparing for collapse, each country according to its priorities.

7 – We must stop electrifying our societies; electricity is the first thing that goes when our societies collapse.

8 – There's nothing more we can do to fix the mess we've made; we've had our chance and blew it.

9 – We've waited too long.

10 – It's too late.

Just to be perfectly clear.

SM745

Do you feel the audacity, the temerity, the nerve, the gall and the chutzpa?

Someone posted a link to an article, stating:

“Experts say ‘It’s over. 2023 was Earth’s hottest year”

This was my response.

“Just a few things to consider here. First of all, see if you can get through the article all the way. Did you manage? Or did you feel a tendency to leapfrog it under a *‘Yeah, yeah, enough already with all the doomsday messaging. So, it was hot, so what? And now what? Because I have heard that EV’s are going to save us.*

Of course, I’m paraphrasing here and I’m not saying everybody reacts that way. Bit I did read the article all the way through. I have to. It’s my thing. And it’s a good article. Spot on. Valuable information. Concise and succinct. Not too scientific at all. But I’m getting an entirely different vibe from it. Because this message won’t one bit of a difference whatsoever. Not one bit. It will just drown in the endless timelines of the social media and news outlets. It’s not even click bait.

Look, we know this already. We’ve been reporting about the climate getting hotter and hotter for years now. And now we’ve reached a point where we see the process as a whole even accelerating. In fact, we’ve been producing books, reports, videos, analysis, articles, posts, comments and conferences (28 of them in as many years) for over half a century now and none of them has made the slightest dent in the rising curves of global greenhouse gas emissions, atmospheric greenhouse gas levels, average surface temperature and the Earth’s energy imbalance (just to name a few).

They are all just going up. So, what's the point? Why do we share this? Most of us feel either helpless or try to engage in some individual, local or even regional green initiative that makes us feel pretty good, but in reality, doesn't change a damned thing either. Maybe it's time we change our mode of operation.

Perhaps we should STOP organizing international climate conferences that add no value and change nothing. Maybe we should STOP writing articles about how hot it was and how hot it's going to be. Maybe we should START to admit that we're doing diddly squat to fix this. We're only writing and talking about it, but on a global level, things just keep getting worse. Perhaps we should START to say something entirely different:

- *We have waited too long.*
- *It's too late.*
- *We've had our chance and blew it.*
- *We now have to suffer the consequences of our collective behavior.*
- *All of us. Everywhere.*

Wow! Did you feel it? The audacity? The temerity? The nerve, the gall and the chutzpa? How dare I?

PS The way things are going, 2023 is not going to be the hottest, but the coolest year, compared to the next three decades.

T h e N e x t S t e p : C o l l a p s e A w a r e n e s s

Chapter 3

About climate stupidity

3.1

SM647

**‘Oh, Almighty Algorithm,
please forgive us, because we don’t know
what we’re doing’.**

LinkedIn is a free medium, providing services to market and promote your work and your business. It’s free only in a literal sense. It doesn’t require you to pay a monthly fee — for now — but it nevertheless comes with a price. Platforms like LinkedIn are only interested in maximum exposure to advertisement. It doesn’t care one bit about your career. It just needs your attention to ads, hoping you’ll click on them.

Providing a link in a post drives visitors away from the medium. LinkedIn is the only platform ‘translating’ links to shortened designations, obscuring the origin of the source, for the same purpose. Just look at all the things we ‘must’ do to satisfy the needs of the Almighty Algorithm. It’s preposterous. It

determines, just like the Ten Commandments, what thy shall and shall not do. How, what and when to write. How often.

It leads to unnatural behavior in terms of freedom of content, speech and style. It all starts to beget the universal smell of garbage. Look at your timeline! Ever other post or so is promoted. Mandatory payment is on the way. Will we, I wonder, ever escape the downward spiral of greed, growth and profit?

PS When I started my post, a message appeared:

“Allow AI to help you with a first concept. Provide us with detailed information about your ideas, such as important points and examples. This allows us to assist you in writing a first concept version with help from AI”.

What the h...? So now we are seduced to reduce our writing skills to elaborate prompts — that require no writing skills at all — that feed the AI to write your posts for you. I hope we do not think this AI is an independent source, a friendly assistant helping you to gather your thoughts and write better posts. Because it's not. This is LinkedIn's AI, designed to 'help' us adhere to its basic needs: exposing you to advertisements. It's still the same Almighty Algorithm, faking gallantry and sophistication, but instead of stimulating our creativity and originality, it makes us lazy, shortsighted and ignorant.

AI promotes stupidity.

The message had a little cross in the upper right corner, but I couldn't click it away. It kept staring me in the face, probably because I wouldn't 'prompt it'. What is my punishment for non-compliance? My posts don't reach diddly squat! It doesn't matter what message I intend to convey, what ideas I might

have, what insights I might want to give you, as long as I don't prey to the Almighty Algorithm, my voice is dampened, my cry-outs are muted and my contemplations are obscured.

I guess the most frightening thought is to extrapolate these trends. I foresee AI's communicating with other AI's, exchanging brilliant thoughts in picoseconds, where no human being can get to them. But hey, that's me, just contemplating my fate.

Just think about it for a while. That's all I ask.

Thanks for your time.

3.2

SM648

AI will render us obsolete and superfluous

I saw a post floating by promoting the latest AI-app that is able to create ‘beautiful’ and ‘artful’ images just by prompting it. It was accompanied by a few different examples of ‘pictures’ of a hand holding a bowl of colorfully glowing structures and so on. It boasted ‘how easy it is to create these kinds of images’.

This was my reaction:

“But you are not ‘creating’ anything! You are just prompting. Asking a ‘higher power’ to create something for you. ‘Creating images is very easy’. No! Asking an AI to do it for you, is very easy.

Now imagine what it takes to create these images yourself with, say, oil paint and brushes. Or with a pencil and eraser. You would have to have some knowledge about the use of color, perspective, the Golden Ratio. In short: you would actually have to have skills of some kind. Using AI to create poetry, images, pictures, movies, songs — any kind of human art form — reduces our own skills, our own originality and our own creativity.

Using an AI app is not creative at all. You can sit in your lazy chair prompting away all you want, but all you have done is rehash what other people did before you, without having any skills of your own. What keeps amazing me is that we use AI-apps and actually present the results like we’re artists ourselves. But it

is not creation. It is not art. It is not imagination. It is not original. And it is not a skill.

With every AI-app we use, and with every prompt we give them, we become a little bit less skillful, a little bit less original and a little bit less intelligent.

In the end it will render human skills obsolete and superfluous.”

3.3

SM650

Why do we keep repeating the same message over and over again?

I find it interesting to see so much news about the climate, all conveying the same message over and over again. Some of this news is as scientifically/ economically/ politically elaborate as this reporting, 244 pages of dense packed information that only a few people actually read, let alone understand.

Other reporting is less elaborate, with short statements of science fact, usually accompanied by simplified colorful pictures and graphs. And, of course, there is still a lot of doubt being sowed, deception being spread and deceit being injected into the rational discourse. But what fascinates me the most is that even the science/ reality/ fact-based reports and analysis keep repeating the same message over and over again:

- *Yes, the situation is unbelievably bad.*
- *Yes, it has gotten a lot worse since the last time we spoke.*
- *Yes, if we don't do something soon, it will get even worse.*

And then it says:

- *But it's not too late.*
- *We can still do something, if we start now.*
- *We all need to collaborate in order for this to work.*

And then, on a global level, nothing changes. We just keep going on like we did before. This is how it's been for the past 70 years: *S.O.S.: Same Old Shit.*

Now, would you care to extrapolate?

3.4

SM651

Do you want to become more ignorant, shortsighted and stupid?

I saw yet another post about an AI adept and fanatic, providing us with detailed instructions on ‘how to prompt properly’ and how to get the best for your free ChatGPT-buck. This was my response:

“I just can’t believe that we don’t see it.

We are teaching each other to become better ‘prompters’. What to do and what not to do when engaging the Almighty Algorithm, to optimize its response: regurgitations of text that has been written before. Great writers, scientists, philosophers, management and leadership specialists, poets — anyone with excellent writing skills has filled the AI’s database with letters, words, sentences, paragraphs, chapters and structures.

The AI doesn’t mimic the specific skills of these human beings, or the humans itself. It just displays its single-minded, non-conscious, non-intellectual, non-self-aware ability to process enormous quantities of data in extremely tiny amounts of time.

‘Which word would statistically follow that word based on the giga-quads of data I have analyzed, and what word would come next?’

That's all the AI does. The outcome looks human, smells human and talks human. But it is not. With each prompt we give it, we become a little bit less skillful. With each 'act as', 'do task' and 'show as' we apply, our intellect drops a few points. With each prayer to the Almighty Algorithm, we become a bit more ignorant, shortsighted and stupid.

Are we really this obtuse?"

3.5

SM655

We truly are Homo infantilicus

Over the past year I have written almost 800 posts about our existential predicament on *LinkedIn*. Somebody wrote:

“[...] what I’m seeing in the last few months is that your engagement has declined. Maybe it’s a gut feeling, but it feels like people are no longer engaging with your articles the way they have in the past.”

This was my response:

“Thanks for asking about my ‘approach’. Allow me to be a tad blunt, but extremely specific nevertheless:

1 – I don’t give a rat’s ass about my ‘engagement’, if you’ll excuse my French. I categorically refuse to worship LinkedIn’s Almighty Algorithm, which dictates what to write, in which manner, when, how much, how often and in what style, to increase ‘engagement’. I write what I want and when I want to, especially because it doesn’t make one iota of difference. But I am a writer, so I must write.

2 – More brilliant writers than yours truly have authored the best works on the environment, biodiversity and climate over the past half a century and none of them made even a little dent in a pack of butter.

I have read all of them for my latest book (and eight addenda), and the theories, ideas and concepts to avoid suprasystemic collapse and ‘make this world a bigger place’ are brilliant. Really. None of them, however, made the slightest difference. Everything got a little bit worse at every turn.

3 – In 2015, when I published my 5th book, I called myself an incorrigible optimist.

That’s all gone. I am a self-pronounced ‘confrontalist’ now, because only a frontal confrontation with reality might open our eyes for what is to come.

4 – It doesn’t matter where we stand on the scale between ‘doomsday preaching’ and ‘erratic optimism’, none of it matters (anymore).

We’ve been exceeding the carrying capacity of our habitat for over 70 years now. Something’s gotta give. We just don’t have a clue what it means to pass the elbow of the exponential curve. We think it can’t happen to us — systems crash and societal collapse — because we are the dominant species on this planet. But it’s precisely our dominance that will be our doom.

Our living environment has entered a state of cascade failure, whether we like it or not. I don’t like it. You don’t like it. Nobody likes it. But that’s irrelevant. We had all the means to fix it 70 years ago. But now it’s too late. We’ve waited too long. It’s out of our hands now. Don’t you see? We’re headed for suprasystemic collapse. Not in a few centuries, not next century, not by the end of this century, not in 2070 or 2050, but within the next 10 years.

The signs are all over the wall and yet we keep adding 150 million tons of CO₂-equivalent to the atmosphere every day. Something’s gotta give. So, thanks, but don’t worry about my engagement. I. Don’t. Care.

I'm not doing this for engagement, I'm doing this to purge myself. The worries of the world are not for me to carry any more. Because believe me, I have carried. I have huffed and puffed, but the brick wall just wouldn't falter. For my 6th book I have done 2 years of research, reading over 300 books and ploughing through countless scientific studies by renowned scientists. It has scared the bejesus out of me. Scientists in general and climate scientists in particular are overly cautious in nature. No hyperbolic language, no exaggerations, no guessing or estimating, no fear mongering. Even the IPCC reports are overly cautious, not taking into consideration the feedback loops that cause a runaway climate leading to a hothouse earth. We have entered that stage already. The climate is running away with us.

And what do we do? We send 70.000 people (by plane) to Dubai to engage in discourse. Tens of thousands of fossil fuel lobbyists fly with them, trying to squeeze the last drop out of their fossil fuel infrastructure to satisfy the shareholders. It's the nature of the beast, Homo sapiens, the human species. We'll keep consuming until the very end, shamelessly and foremost, ignorantly.

And that's why I believe we don't deserve to be called Homo sapiens, 'the wise, modern, thinking man' and more. We truly are Homo infantilicus."

3.6

SM659

How to upset an oil sheikh

I saw a post referring to a speech that Al Gore gave, you know, the guy from ‘Un Inconvenient Truth’, after the completely failed COP28, this time in a fossil fuel loving country and chaired by an oil sheikh. I wrote the following comment:

“Even for Al Gore’s standard of typical U.S. loud and brazen rhetoric, his statement is, however concise and succinct, still fundamentally vague. What, for Pete’s sake, is ‘a commitment to phase out fossil fuels? What is a ‘commitment’? What is a ‘phase out’?”

Commitment [/kəˈmɪtm(ə)nt/]

- 1 — The state or quality of being dedicated to a cause, activity, etc.
- 2 — An engagement or obligation that restricts freedom of action.

I like the second one better than the first one, don’t you? Be that as it may, a real commitment must be accompanied by ‘punishment’ at non-compliance. If you set to achieve a target in the future today, your target of tomorrow must already be ‘punishable’.

To make that concrete:

If you really want to upset an oil sheik like Sultan Ahmed Al Jaber, chair of the COP28, but also CEO of a fossil fuel conglomerate, with a three-billion-dollar yearly revenue, you must talk to him like this:

“Ok, so you want to phase out fossil fuels. Good. That means that you have to phase out your revenue too. Next year, in 2024, you must reduce your company’s revenue by \$ 275 million and do that for another 11 years until your revenue is zero in 2035. No. More. Growth. Now, how are you going to accomplish that?”

3.7

SM66o

It appears we really are this obtuse

After another post referring to another article with a positively hopeful view of the future of humankind, seemingly ignoring the fact that 2023 was the year we passed the elbow of the exponential curve and that our living environment entered a state of cascade failure, the precursor to suprasystemic collapse. And that we can avoid all this by simply ‘reducing our fossil fuel emissions by 18% a year for 10 years straight’. This was my response:

“I just can’t believe we keep saying that ‘it’s not too late’ and ‘we can still make it’. In 2020, the first year of the Corona pandemic, we went into global lockdown and only reduced global CO₂-emissions of fossil fuels and industry by about 7%. Seven per cent! With the entire world in complete lockdown!

But that wasn’t out of free choice. Our hands were forced. We accepted it with our teeth grinding and took to the streets (and to the social media) to nag and wine about it profusely, on every occasion, relentlessly. During the pandemic, more than 7 million people died worldwide. Still, we couldn’t wait to restore our consumeristic habit. In 2021 we were back at 2019-levels and in 2022 we emitted more CO₂ than ever before: 37,5 gigaton. This year we will approach the 40 gigaton. We couldn’t wait to restore our lost wages, turnover, profits, holiday travels and filthy consumeristic habits. We all wanted to get back what we lost — may the environment, biodiversity and climate be damned.

And now we think we will VOLUNTARILY, out of free will and out of free choice, against the will of the free market, reduce emissions by 18% a year (!) for 10 years straight?!

I just can't believe we are this obtuse. It's quite scary really."

3.8

SM662

Falling unto our knees for the Almighty AI

Somebody was writing about what he was doing. He was doing something with AI. He was ‘doing AI’. He seemed to be doing a lot and being terribly smug about it too. He was actually really proud of the output he was generating from AI, with AI, by AI, through AI. He was doing the AI thing, you know.

This was my response:

“But, my dear fellow, you’re not doing anything! Don’t you see?”

- *You are not writing your hooks*
- *You are not getting ideas*
- *You are not making images*
- *You are not creating original, world-class content*

The AI does that for you. With every prompt the AI gets a little smarter and you get a little less intelligent. To prompt is not a skill! It’s an enhancement tool to increase human laziness, complacency, accomplishment, ignorance and stupidity. It’s a destroyer of skill, accomplishment, insight, originality and creativity. Whilst the AI is getting more intelligent and more insightful about human nature and human skills, we go down the slope of thinking we have a new tool, to becoming one ourselves.

We are becoming AI’s tool.

It will rip away what makes us truly unique as a species: thoughts and ideas of our own, insights and perceptions of our own, ways to transform these thoughts, ideas, insights and perceptions into products, services, art and entertainment. We used to do that ourselves. Now we simply ask the AI to do it for us. And the worse thing is we love it. We dance around the AI campfire, singing, worshipping and praying for more apps. We fall unto our knees for it, asking for more and more.

Bloody hell.

3.9

SM665

How to rattle the cage of an oil sheikh

Forget about the fact that the 28th Conference of Parties on climate change / global warming in 2023 was held in a fossil fuel loving country, chaired by an oil sheikh, and forget about the behavior of that oil sheikh during these two weeks of futile negotiations about the fate of humankind. For a short while the news outlets and social media platforms were inundated with outrage about his comments on the phasing out of fossil fuels and how he was wiggling, squandering and squirming to avoid shouting out that ‘Yesss, I adore fossil fuels! Can’t live without them, can’t have enough of them!’

So, I wrote:

“Listen folks, please, don’t fall for it. Don’t go down the rabbit hole. Don’t complicate it, obfuscate it or rationalize it. The only way to rattle the cage of an oil sheikh, in this case one being the CEO of a fossil fuel conglomerate with a yearly revenue of \$ 3 billion, is to let him say what he wants to say, listen quietly without interrupting and then ask him to answer the following:

“Mister El-Jaber, your fossil fuel company makes a yearly turnover of \$ 3 billion. You agree that fossil fuels must be phased out to avoid climate catastrophe, so let me ask you this. To phase out your company too, you have to:

- *Reduce your yearly turnover by \$ 300 million every year for 10 years straight, to reach zero turnover in 2033.*
- *Dismantle your global infrastructure to either be completely demolished or be entirely reconstructed to accommodate the production of renewables.*
- *Inform your board members and shareholders that your revenue will decrease by 10% yearly for 10 years straight, rendering shareholders value effectively negative from now on.*

Now, I have only one question for you: how are you going to achieve all that, starting tomorrow?”

That will make steam emerging from his nose and blood running down his ears.”

3.10

SM668

We just want your money

I saw a post with a report on the lawsuits that are ongoing against the fossil fuels industry, trying to make them see the error of our ways and make them pay for all the harm they have down.

Right...

This was my response:

“Aha. I see. So, after 28 international climate summits we have now found the solution: asking the fossil fuel industry for their money. We think that they have put us in this mess, so now they just have to pay for it. Simple as that. Cough it up!

“We want all your money please. Just give it to us. All of it. We need it to repair the damages you have done. No, please don’t sue us. Just give us your money.

What’s that? Aha. You’re not inclined to do that. Doesn’t matter. Give it to us. We want your billions to...

I’m sorry? Aha. Ok. A cease-and-desist letter. Mmm. But why don’t you just give us your money then?

Aha. Because it's yours to keep. I see. How about a little bit then? Maybe not your billions, but a few millions then?

Aha. Ok. I see. A restraining order. Ok. So, you don't want to talk about it? Sorry, what? In violation of the restraining order? How so? I'm just asking for your money...

Good day, officer. What can I help you with? I'm sorry what? Turn around and do what? Bend over? Ah. You're joking. Oh, you're not joking. Yes. I will turn around. But you don't need to cuff me. Really, this is quite unnecessary. You don't have to be so rude. Where are we going?

Hello? Answer me please. Where are we going? And why is your van unmarked?

Hello? Sir?"

3.11

SM691

Small victories aren't big potatoes

I saw a post referring to an article describing how Ecuador voted 'to halt oil drilling in biodiverse national park', preventing 'approximately 726 million barrels of underground oil in the Yasuní National Park from being exploited'.

This was my response:

“Good development. Excellent initiative. Every step counts. Right? Well...

To prevent us from crying victory, claiming this is 'the beginning of the end of the fossil fuel industry': 726 million barrels of oil is about one week (about 2%) of global oil consumption That's right!

— *We burn 100 million barrels of oil daily, along with 22 million metric tons of coal and 11 billion cubic meters of natural gas.*

— *We produce, also daily, 190.000 non-electrical vehicles, 1 million metric tons of plastic, 5,5 million tons of waste and 11 million tons of cement.*

— *Global fossil fuels subsidies were up to 7 trillion dollars in 2023.*

— *Global CO₂-emissions of fossil fuels and heavy industry were 37,5 gigaton in 2022, an all-time high, rising to 43 gigaton in 2050.*

— *Every day we add 150 million tons of CO₂-equivalent to the atmosphere. The CO₂-level is at 420 ppm, rising to 500 ppm in 2050 (preindustrial levels were 280 ppm).*

It is understandable that we celebrate small victories, enlarge and amplify them. But that doesn't make them big potatoes. The only thing that counts is the global decrease of greenhouse gas emissions and atmospheric CO₂-levels. Small potatoes won't cut it, folks. If it's not global, it's futile."

3.12

SM730

I wish I was a climate change denier

If I was a climate change denier, my job would be so much easier.

- *I wouldn't have to prove that vested climate science was wrong, nor would I have to prove that my assertions were right. The only thing I'd have to do is sow doubt. Easy peasy.*
- *I would only have to misrepresent graphs, cherry-pick the data, point out irrelevant mistakes, emphasize, enlarge and ridicule them endlessly.*
- *I would never have to engage in a rational discourse or react substantively to any counter argument, I would just ignore it and keep throwing obscure website links at everybody.*
- *I would love the agony and frustration of climate scientists trying to make me see the truth and reality of climate change, but it wouldn't matter to me, because once the seeds of doubt are sown, the weeds will overgrow that truth and reality in a heartbeat.*
- *I would love to see all that scientific nuance being swept away by the endless subsequent debates on climate change myths that already have been debunked a million times, because it would only invoke more doubt.*

Because what do people do when in doubt? They retreat. They fall back into defensive positions, surrounded by peers that follow their lead. They will withdraw into their own echo chambers.

Oh, how I wish I was a climate change denier.

T h e N e x t S t e p : C o l l a p s e A w a r e n e s s

Chapter 4

Global consultation doesn't work

4.1

SM661

The strange emptiness of the Conference of Parties (COP)

I find it a most intriguing attribute of human behavior:

- *We enlarge conferences like this to such proportions that it emits a sense of seriousness, truthfulness, trustworthiness, reliability and confidence that simply isn't there.*
- *We lie, cheat, divert, distort and distract the information we put in, the way we process it and what comes out of it as a 'result'.*
- *We completely negate the fact that no COP in history has ever made even the slightest dent in the climate pack of butter, having no effect whatsoever on the emission of greenhouse gasses, the global atmospheric greenhouse gas levels, the average global surface temperature and the Earth's energy imbalance (just to name a few).*

The Next Step: Collapse Awareness

And then we decide to come up with some ‘good news’, right at the start of the conference, to provide ‘evidence’ that something’s actually been done to mitigate our existential predicament. That ‘little something’ is expressed as an absolute number (‘\$ 100 million’) but not as a relative number (‘only 0,1% of the amount required’), so it sounds like a lot.

In the end, when COP28 has failed completely, as all of the 27 COPs have before, we say that it wasn’t in vain, because ‘we got our \$ 100 million’. There’s a strange emptiness surrounding the Conference of Parties. I wonder why we keep organizing them.

4.2

SM68o

COP28: the art of being creative with semantics

When the COP28 was finally finished in December 2023, there was a lot of outrage about the end report. And rightfully so, because I have never witnessed such ignorance, shortsightedness and sheer stupidity surrounding the annual international summit of creative semantics. This was my reaction:

“Are we really this obtuse? I just can’t understand the enormous level of naivety that is exposed here. It is a well-known tactic in negotiations of this magnitude, to make a lot of fuss about the first drafts of an end report that, naturally contain statements that are disappointing and underwhelming by design. Then, after a lot of fuss, outrage and media attention the final draft is adjusted to some extent, with a little bit of semantic juggling and clever but obscure wording.

And then all over sudden we fall unto our knees and thank goodness that we’ve actually achieved something, that we now may all live and love happily ever after. But don’t you see? The first drafts are méant to be outrageously disappointing and vague! We let that drag on for a few days, so we’re all fired up about it. And then we don’t see that the final document isn’t any better at all.

It's all semantics. Every COP ever held was all about appearances and creative semantics. With every human being we add to a collaboration the number of problems doesn't increase linearly, but exponentially.

*People are the mother of all f*ck-ups!*

Who will hold the countries accountable for non-compliance? The UN? The WHO? Greenpeace? Extinction rebellion? Oh, come on!"

PS If you are annoyed by COP28, don't bother. Let Jonathan Pie be annoyed for all of us. This video was made during COP26 in Glasgow in 2021:

https://youtu.be/5s3RLl_xq7M?si=TMAemrW85bLHOVcr [Jonathan Pie: The World's End]

I love the rants of Jonathan Pie. It doesn't change a thing, mind you, but boy, does it make one laugh in anger, frustration and anxiety simultaneously.

4.3

SM682

The magical, wishful thinking of COP28

Somebody gave a reaction to the COP28 end statement:

“This bit is hopeful: 28. (f) Accelerating and substantially reducing non-carbon-dioxide emissions globally, including in particular methane emissions >by 2030<” [sic]

This was my response:

“Excuse me for unleashing the global program manager in me, but let me ask you some follow-up questions, if I may:

- *What does that mean, ‘accelerating’? By how much? Compared to what?*
- *What is ‘substantially’? How much is that? Compared to what?*
- *What is ‘reducing’? How much? Compared to what?*
- *What does that mean, ‘by 2030’? What happens if that target is missed?*
- *What happens if nations are not complying? What kind of enforcement or penalties are applied?*
- *What, for heaven’s sake do you mean by ‘this bit is hopeful’? That the other bits are not? That the whole paper is a worthless piece of rubbish, but there are some small hopeful bits here and there? And that makes it a success somehow?*

I just can’t believe we’re this obtuse. Again.

This year our living environment entered a state of cascade failure. Global warming is accelerating and getting clear out of control. The extreme weather and climate disasters are increasing in frequency and intensity. Records are broken with alarming numbers. And then we send 70.000+ people to an oil state to discuss global warming with fossil fuel lobbyists, chaired by an oil sheik and inundated with discussion panels sharing hopeful tales of magical, wishful thinking, whilst singing 'Kumbaya, My Lord' around the campfire.

And then we produce a frivolous document that doesn't allow for any enforcement or penalizing at non-compliance.

Hallelujah! Praise be! Let's rejoice!

4.4

SM686

Why I’m not falling on my knees to praise the final statement of the COP28

If you follow me here on LinkedIn, you know that I am quite skeptical — and yes, that’s the understatement of the century — about the global efforts of humankind to mitigate our existential predicament. To put it in other words: it’s minimal, pitiful and pathetic in terms of action, progress and result. On a global level — the only level that counts — we’re doing diddly squat to counter the worsening effects of environmental pollution, biodiversity loss and climate change.

So, you can understand I’m not joining the crowd, circling the COP28 campfire in a joint conga, singing ‘Kumbaya, my Lord, Kumbaya’. In fact, I am appalled by the extreme levels of naivety that are displayed about the end report. I just can’t believe we’re this obtuse! We have completely fallen for the devious tactic of producing an early draft document with weak statements and vague language, inducing frustration, anger and outcry, to linger for a few days and inundate the news outlets.

Then a final document is produced, with some minor changes that are still weak and vague, lacking any means of sanctions at non-compliance. But we are lifted out of the valley of despair and subsequently fall unto our knees with gratitude and relief.

That's just sweat.

I hope we do understand that we are *nó*t a United Nations of the World. That we *dón't* have a President of the Planet with a Mighty Global Cabinet. That instead, each separate nation, all 196 of them, is allowed to conduct its own national cultural, social, political and economic policy as they see fit? (and start a war over land, resources and intolerance at any time). I hope we do understand that this will change nothing. Once all 70.000+ attendees, including all lobbyists and board members of the attending fossil fuel conglomerates, have flown back to their home states, to go back to business as usual, no one will come for them.

No one will hold them to their tough talk, promises and pledges. No one will say 'Look, mister, you promised to do this and that and yet you still haven't lifted a finger, so get off of your butt and get cracking!' And even if someone did, the response would be something like 'Hold your horses, man! Take it easy. We've still got time. 2050 is still a long way out and we've got other priorities here!' <stating a list of social, cultural, political and economic priorities that take precedent over COP28>

Look at these graphs:

<https://www.demensalsgrens.nl/grafieken/>

Who are we kidding? Our living environment has entered a state of cascade failure. The jetstream is meandering and accelerating, the oceans are overheating, acidifying and deoxygenating, the global ocean currents are destabilizing and slowing down. These are Earth's Main Management and

Control Systems. They don't have an on/off switch, a reset button or an edit/undo function.

And we're all singing 'Kumbaya My Lord'. If it weren't so damned serious, we'd all have a good laugh about it.

4.5

SM687

What's the alternative?

After the disastrous COP28 of 2023 I suggested that we should stop organizing them at all. ‘We should stop all international summits on the environment, biodiversity and climate’. Théré. ‘Don’t be daft!’, someone responded. ‘If we stop organizing them, what’s the alternative?’

This was my response:

“The alternative is not to have any more global conferences about the environment, the biodiversity and the climate.

The alternative is to bring the discussion back to the nation states, preserving their own national, cultural, social, economic and political interests — as they always have and always will — and concentrate only on resilience and damage control.

The alternative is to accept the fact that we have waited too long, that we are now too late to do anything about our existential predicament anymore.

The alternative is to bow our heads to nature and accept the fact that adding excessive greenhouse gases to the atmosphere as a result of our neoliberal, capitalistic, consumeristic, growth-economic free market will ultimately punish us with suprasystemic collapse, just because of the fact that we failed to act when we still had a chance.

The alternative is to acknowledge that overshoot or overconsumption, when a population exceeds the carrying capacity of its habitat, is always met with collapse, as a law of nature.

The alternative is to batten down the hatches and buckle up, because once we've passed the elbow of the exponential curve it's downhill from there.

The alternative is to finally STOP trying to fix it.”

4.6

SM693

STOP the COP!

Ok. Two things about the COP28 and then I'll stop nagging and wining about it.

For the record: COP28 is the 28th session of the Conference of Parties: 'The COP is held annually to discuss and find solutions for climate change. COP28 was held in the UAE at Dubai Expo City from November 30 to December 12, 2023. A zero-carbon and resilient world is the theme of COP 28.' The COP was chaired by an oil sheikh and about 70,000 people attended, including thousands of fossil fuel advocates and lobbyists. The end report was a mindboggling example of creative semantics and word joggling, making it sound like a big victory without anything to show for it. Like all previous COPs.

Off the record: COPs on the climate don't change anything about the climate changing.

We've been having them for 30 years now and none of them have changed anything about (1) the rising greenhouse gas emissions, (2) the rising global atmospheric greenhouse gas levels, (3) the rising global average surface temperature and (4) the increasing energy imbalance of our planet.

And that's why I think we have one of two options:

1 – *Fire COP attendees*

Prohibit responsible COP attendees from attending ever again if the above mentioned KPI's don't start to go down within one year after a COP. Fire them and replace them with people that actually know how to do the work.

2 – STOP the COP

If the attending parties don't want to comply with option 1, just shut the whole thing down. STOP the COP. Quit sending tens of thousands of people to an oil state, accompanied by thousands of fossil fuel lobbyists, to have the conference chaired by an oil sheikh and have them cough up some document that doesn't really say anything about actually reducing these numbers.

This whole COP-business is starting to get more ridiculous every year. We keep having these summits without any global results whatsoever. It's all just a lot of talk, semantic games and word joggling, a lot of politics and fossil fuel lobbying, allowing the current status quo to continue. If we can't make it stick, just quit the whole damn thing and bring responsibility back to the individual nation states. Let them determine for themselves what is more important: their own historical, social, cultural, political and economic vested interests, or to preserve and protect the living environment that we need to maintain human societies.

The only thing that matters is that we actually show progress on a global level and that these graphs start to descend. The only thing that matters is that we bring the global atmospheric CO₂-levels back down to below 300 ppm. That we restore the Earth's energy imbalance. That we bring the global average surface temperature back down to zero degrees compared to preindustrial levels.

None of that has been achieved so far. In fact, the global warming KPI's are accelerating. Everything just keeps going up and we still celebrate semantic victories. It's preposterous. If it wasn't so damned serious, we'd all have a good laugh about it.

Chapter 5

Science, truth and reality

5.1

SM644

Carbon capture is a pipedream

Every time I read posts about *Direct Carbon Capture* (DAC) or *Carbon Capture and Storage* (CCS) like this I am flabbergasted. Are we really this obtuse?

DAC/CCS is a delusion, a pipedream. Even if we were to scale up to a few gigaton of carbon capture and storage every year — current capacity is at a few hundred million tons yearly — it would still be like water specks on a hot plate.

We emit 100 million tons of CO₂ of fossil fuels and industry every day! Cumulative global CO₂-emissions are at 1.500 gigaton, rising to a whopping 2.500 gigaton in 2050. CO₂ stays airborne for thousands of years. Current global atmospheric CO₂-level is at 420 ppm, rising to 500 ppm in 2050. Preindustrial levels were at 280 ppm.

DAC/CCS is incredibly expensive too. Prices of removing and storing CO₂ vary between a couple of hundred dollars to over a thousand dollars per ton. To remove all of the yearly CO₂-emissions (about 40 gigaton) and all of the global cumulative emissions, we would have to remove 100 gigaton of CO₂ every year for 25 years straight, without letup. The cost would amount to half the GWP, the Global World Product, currently at \$ 104 trillion, every year.

That's right! We would have to spend about \$ 50 trillion dollars yearly for 25 years in a row. We would go bankrupt before we collapse (*).

Don't believe me? Well, I've done the math. Check it out for yourselves:

- Calculations on a global scale: <https://lnkd.in/eR3ZWkjb>
- In short: <https://lnkd.in/dkEZbmZF>
- Specifically for the USA: https://lnkd.in/erUf_9PH
- And while you're at it, check this out: <https://lnkd.in/eNAFmhRx>
[“Ten Reasons Why Our Civilization Will Soon Collapse”]

(*) John Pratt on collapse:

“[...] Let me explain what I mean by ‘collapse.’ First of all, it doesn't necessarily mean that humans will go extinct. While that is certainly a plausible scenario, given the many existential threats we are facing, I still believe it is unlikely. Small groups of humans survived in exceedingly difficult conditions for tens of thousands of years.

By collapse, I mean a breakdown of social institutions like governments and economies, followed by a dramatic decline in the human population. I realize

that's still kind of vague, so here's a more specific definition I found in the book, 'How Everything Can Collapse.'

It says, 'A collapse is the process at the end of which basic needs (water, food, housing, clothing, energy, etc.) can no longer be provided [at a reasonable cost] to a majority of the population by services under legal supervision.'

As society breaks down, life will get simpler and simpler. By the late 21st century, people will be living the way they did in the early 19th century."

5.2

SM669

Aren't we a fine species

I came across this scientific study by Hansen e.a. on the topic of accelerated global warming:

<https://academic.oup.com/oacc/article/3/1/kgad008/7335889?searchresult=1&login=false>

[‘Global Warming in The Pipeline]

This was my comment:

“Dr. James Hansen puts his money where his mouth is. He dares to say what nobody else seems to dare to say. I’m with him. He and his team, they are spot on with their analysis. Now here’s what’s human society does to this kind of truth-sayers:

1 – Ignore

Just don’t respond to it, hoping it will get drowned in other news.

2 – Counter

Other scientists will challenge his work, as scientists are supposed to do, creating confusing amongst the crowd.

3 – Sow doubt

Nitpick on details in Hansen’s study, find irrelevant irregularities, nag and wine about this tone or style.

4 – Attack

Use the ad hominem approach to attack the messenger, discredit him, make him look untrustworthy and drag his team down with him.

5 – Bribe

Use big money to ‘buy him away’ indirectly. With billions at their disposal the fossil fuel industry can bribe anyone.

6 – Distract and delay

Point to other less relevant, less urgent and less important matters to drive attention away from truth and reality.

7 – Carry on

Keep adding 158 million tons of CO₂-equivalent to the atmosphere every day for as long as possible to keep the oil, gas and coal money flowing.

Aren’t we a fine species. Real dandy. Just swell.”

5.3

SM671

Is the abated or unabated truth?

Just one of my responses to the Conference of Parties, the COP28 of 2023:

“Well, well, well. This year is the year we passed the elbow of the exponential curve. Our living environment has entered a state of cascade failure. The jetstream is meandering and accelerating, the oceans are overheating, acidifying and deoxygenating, the global ocean currents are slowing down and destabilizing. These are Earth’s Main Management & Control Systems. There is no on/off switch, no reset button, no edit/undo function.

And what do we do? We send 80.000+ people to an oil state to conduct a climate conference, chaired by an oil sheik. We allow thousands of fossil fuel lobbyists to participate, making shady deals in dark corners to sustain the excavation of oil, coal and gas. And we do our magic with semantics. Brilliant!

Somebody clever and creative came up with the perfect adjective to serve the schizophrenic nature of such conferences: maintaining the world’s neoliberal, capitalistic, consumeristic, growth-economic free market, whilst suggesting that the ecology will be preserved as well. That adjective must sound intelligent, scientific and complicated. ‘Abated’ and ‘unabated’ will do just that.

So now we can say proudly that we ‘wholeheartedly support the complete, utter and final phase out of UNABATED fossil fuels. *S.O.S.: Same Old Shit.*

5.4

SM688

Beware of the nitty gritty details

I have debated a lot of people on the topic of climate change / global warming, varying from extremely obstinate climate change deniers to well-informed, scientifically oriented climate change adapters, and everything in between. And while I try to keep the debate civil and on the highest possible level, the global level, where overshoot or overconsumption should be our major concern.

One of the tricky things during a debate is when you're lulled into the realm of details, to discuss the endless amount of different aspects of climate change, large and small, from the behavior of a single CO₂-molecule when hit by radiation in the infrared spectrum to the various ways we can determine global greenhouse gas levels and average surface temperatures thousands and millions of years ago. Beware of the nitty gritty details!

When I was engaged in what started as a good, rational, substantive debate, my opponent said that 'we won't be able to determine the exact number of gigatons of CO₂ that are emitted on a global level'.

This was my response:

"You are right that we won't be able to determine the exact number of gigatons of CO₂ that are emitted on a global level. That's because we are dependent on what those countries report themselves and how honest they are. Recently it

has been uncovered that countries aren't completely honest and that CO₂-emissions are under-reported. But that doesn't matter.

Because we can measure the consequences of CO₂-emissions independent of the countries CO₂-reporting: we can measure the global atmospheric CO₂-level. And we have. We have excellent data on that. Countries may underreport their butts off, but Mauna Loa Observatory doesn't lie (see attached). Whatever we do, the global atmospheric CO₂-level must go down at some point. The same goes for atmospheric methane, nitrous oxide and water vapor levels, the other main greenhouse gases. But they are going up too.

The global atmospheric CO₂ level leads to another frightening statistic: Earth's Energy Imbalance. That one's a doozy. It should be, in my view, the most important, one and only global KPI to measure to measure the progress humankind is making in mitigating its existential predicament. And that's the scary thing: we're not making progress at all!

Measuring the Earth's Energy Imbalance is brilliantly confrontational. The sun sends us energy (heat) in the form of radiation. That is either reflected back into space or absorbed. When Earth's atmosphere absorbs more heat than it reflects, it heats up. It's really that simple. We measure this imbalance with an enormous precision thanks to satellite technology and what we see should scare the bejesus out of all of us. The 36-month running mean is going up in jolts and bumps, but it is accelerating too. Look at the last jolt it made! That's frightening to the core. Methane levels are up too, but that only makes it worse, since it is 80 times stronger than CO₂ (but only stays airborne for 20 years, instead of the thousands of years CO₂ lingers on). Whatever we do, these two values must go down.

Don't you see, everything you and I do is futile. It's too little, too late. We have waited too long and planet Earth says 'NO!' to us. Suprasystemic collapse has become inevitable. It's locked into the system and we had it coming."

5.5

SM692

Crying an early victory over voluntary carbon markets

I saw an article that the *Voluntary Carbon Market* or VCM, ‘which allows carbon emitters to offset their emissions by purchasing carbon credits emitted by projects targeted at removing or reducing greenhouse gas from the atmosphere’, was in full swing to change the tide, reverse the floodings and save the planet from destruction (I’m paraphrasing just a tad).

This was my response:

“Ok, that’s a remarkable story. And by the looks of it, from the way you describe it, almost shouting it from the rooftops, it seems like you’ve made ‘a lot of progress’ indeed. Now, let’s see what else happened in those eight years you’ve had to change the entire ballgame. Let’s see what we all did in the meantime, during those 2.934 days, in which the VCM made its remarkable progress:

– *We burned 290 billion barrels of oil, 65 billion metric tons of coal and 30.000 billion cubic meters of natural gas.*

– *We produced 500 million non-electrical vehicles, 3 billion metric tons of plastic, 15 billion tons of waste and 30 billion tons of cement.*

– *We added 600 million people to the human population.*

– *The GWP, the sum of all GDP’s, rose from \$ 96 trillion to \$ 104 trillion.*

– *The global atmospheric CO₂-level rose from 400 ppm to 420 ppm.*

- *The global average surface temperature rose from 1,1C to 1,2C*
- *The Earth's energy imbalance rose from 0,9 W/m² to 1,5 W/m².*

The world population is growing with 1% each year, rising to 10 billion people in 2050, and by 2050 the CO₂-emissions of fossil fuels and industry has risen to 43 gigaton, the GWP to \$ 130 trillion, the CO₂-level to 500 ppm and the average global surface temperature to 2,5C. Now, my question to you is simple and based on the only three global warming KPI's that we should monitor before we suggest any kind of progress on a global level:

- 1 – Global atmospheric CO₂-level*
- 2 – Global average surface temperature*
- 2 – The Earth's Energy Imbalance*

When do you expect these Earth-shattering VCM developments to bring these KPI's down? Thanks.”

5.6

SM697

Batteries to the rescue!

I saw yet another hopeful, almost cheerful post leading to an article stating that the cost price of batteries is going down, that the steady state battery is on the verge of breaking through and that we will be able to store large amounts of energy in ‘super batteries’ very soon, you know, for when the sun doesn’t shine and the wind doesn’t blow.

This was my response:

“Aha. I see. Batteries are going to save us from our existential predicament. Batteries to the rescue! Hail to the batteries!

Praise be. May the Lord open.

Don’t get me wrong here, I appreciate what you are trying to say. It’s a hopeful message in dire times. It’s like saying ‘look, we made a mess of things and yes, it looks really, really bad, but don’t despair, rescue is on the way: batteries are going to save us’. However, I believe it’s about time that we change the way we measure the successes and progress made in mitigating our problems with the environment, biodiversity and climate.

Because it doesn’t matter what kind of live saving technology news you see floating by on the social media platforms and news outlets — batteries, wind and solar pricing, heat pumps, EV’s, DAC, CCS, even the planting of a trillion

trees — they all lack the concrete, factual and measurable follow up: when is it going to get better, how will we know we are successful and to what degree?

Therefore, I have a message for all the do-gooders and world improvers, including all 70.000+ participants of the COP28:

https://www.linkedin.com/posts/bartflos_to-all-do-gooders-and-world-improvers-the-activity-7141411527546339328-guor?utm_source=share&utm_medium=member_ios

['To All Do-Gooders and World Improvers']

See also subchapter X in this book.

5.7

SM699

Why the solar industry is *nó*t a paradigm shift

The news outlets and social media platforms are inundated with messages about the accelerated progress of renewables technology deployment, from wind to solar to batteries and back. This one was about the ‘solar industry’ (why does it always have to be named an ‘industry’ or ‘venture’ or ‘multinational’ or ‘conglomerate’ – it keeps reminding me of something) and hoe everything was progressing like lightning and thunder.

This was my response:

“Yes! Great news! We are all saved. Praise be. Look what it says about the ‘solar industry’:

- *‘Leading the charge’*
- *‘Taking the solar stage by storm’*
- *‘A testament to the global shift towards renewable energy’*
- *‘Alighting goals with the global agenda’*
- *‘A paradigm shift’*
- *‘The renewable energy revolution’*
- *‘A global movement’*
- *‘It’s happening now’*

Do you see? There's nothing to worry about! Technology is going to save us, just you wait and see.

Isn't that a comforting thought? That despite all the sad news about the environment, biodiversity and climate, help is on the way and we will all be just fine and dandy in the long run. We just have to ride out the storm. Perhaps. Because I really want to believe that too.

But why not hold them to it? What if we were to change the way we measure the hyperbolic news about renewables and the way we measure our successes and our progress? Therefore, I have a message for all the do-gooders and world improvers, including all 70.000+ participants of the COP28:

https://www.linkedin.com/posts/bartflos_to-all-do-gooders-and-world-improvers-the-activity-7141411527546339328-guor?utm_source=share&utm_medium=member_ios

['To All Do-Gooders and World Improvers']

See also subchapter X in this book.

5.8

SM707

Talking about a ‘remaining carbon budget’ is borderline perverse

I find the concept of a ‘remaining carbon budget’ an insult to our collective intelligence. There is no remaining carbon budget! And if there was one it would be negative.

For instance: if we had started reducing CO₂-emissions of fossil fuels and industry after the IPCC-report of 2001, we would now emit 14 gigaton yearly, on our way to 10 Gt in 2030, 5 Gt in 2040 and 0 (zero) Gt in 2050. Instead, CO₂-emissions are rising to 43 gigaton in 2050. Cumulative global emissions are at 1,500 Gt, rising to 2,500 Gt in 2040. CO₂ remains airborne for thousands of years, so each molecule must be removed from the atmosphere to bring us back to safe levels (between 200 and 300 ppm, as it has been for the past 800.000 years (see attached)).

Talking about a ‘remaining carbon budget’ is borderline perverse. It only encourages procrastination and window dressing. Be that as it may, I do have an answer to the question at the top of the post:

‘How close are we really to 1,5C, 1,7C and 2,0C?’

Here’s my answer, but you won’t like it:

https://www.linkedin.com/posts/bartflos_i-have-done-it-again-i-have-predicted-the-activity-7142870904430067713-BIUx?utm_source=share&utm_medium=member_ios

[Predicting the future by extrapolating the data]

5.9

SM719

Topics for discussion at the Christmas dinner table

Most of us are sitting at the dinner table tonight, Christmas Day [2023], and perhaps tomorrow, Boxing Day, surrounded by small social groups of family, friends, colleagues and/or teammates. Every year we are more or less forced to spend hours together under festive circumstances. Christmas tree, lights, candles, comfort and coziness. Usually that goes well, sometimes it is an annual recurrence of intolerance, irritation, frustration and argumentation. In the latter case, I completely agree with comedian and columnist Joep van 't Hek who once said, and I paraphrase:

“If it is all so terribly miserable every year at Christmas, with all that drunken irritation, old blood that has to be shed and all those old traumas that have to be dug up and smeared all over the place, if you curse it and your relatives every year again, then please STOP – GOING – THERE!!!”

Anyway.

We come together at the Christmas table to eat and drink, have a nice chat and show genuine interest in each other. It is a time of reflection on the year that is almost behind us and the exchange of thoughts, desires and hopes about the year that is yet to come. In any case, this is not the occasion to force the subject towards the environment, biodiversity and climate at the slightest opportunity

and deliver long, gloomy, fanatical monologues about how our living environment has entered a state of cascade failure, that we have passed the elbow of the exponential curve and that suprasystemic collapse has become inevitable.

At least, that's what I found out the hard way. "If I want to be invited again next time," I thought to myself, "it might be useful nót to do that for once." And I have to say, I'm doing better and better. I am increasingly able to delve into more local matters, personal concerns, yes, even trivial topics such as the weather, without immediately bringing up the apocalypse. I also enjoy it more, especially because I can say:

'Do you want to know what I think about it? I've written it all down before, so take a look here:'

<https://www.demensalsgrens.nl/our-inner-limits-addendum-v-to-viii-english/>

I wish you and all your loved ones a very Merry Christmas, a good run-up to the New Year and a Happy New Year itself. And despite everything I know, I wish that to you with all my heart.

Cheers!

5.10

SM733

Something isn't right

I understand that we want to bring good news. There is so much dramatically sad news about the environment, biodiversity and climate that you no longer know where to look. But I think we're missing something here. Because over the past twenty years we have been increasingly inundated with good news. Cheaper batteries, falling costs of wind and solar energy, less deforestation, the long-awaited peak in emissions — when you put them all together, you get the feeling that we will survive, that technology will save us, that we don't have to worry about the future.

But something isn't right.

If all this is true, and if this 'brave new green technology' is going to save us, why aren't global atmospheric CO₂ levels going down? Why does Earth's energy imbalance continue to increase? Why is the average surface temperature on Earth still rising? If everything was going so wonderfully well with the green revolution, why are these values still increasing and even accelerating?

I think it is time that we ask ourselves these critical questions first before we rejoice that everything will turn out fine and all will be swell and dandy in the end.

5.11

SM736

The problem with electrical vehicles

The EV's are coming! They are going to remedy all of our existential issues. The battery technology is only getting better and cheaper, they are clean because there's no greenhouse gas emissions, the travel range is increasing, they are getting more affordable, the network of recharging stations is growing – so rejoice, help is on the way, everything will be fine as long as we all buy an EV as soon as possible and start driving them as frequent and as far as possible. EV's to the rescue! Praise be!

Ok, I may have paraphrased just a tad, but this seems to be the general message surrounding the transformation from combustion engine vehicles to electric vehicles. But, perhaps we're missing the point completely. Because it's not about cleaner or dirtier. It's not even about the depletion of rare minerals or the abuse of work forces in the mines in Africa.

Somehow the only viable solution to the problem of combustion engine vehicles we can think of is to replace them all – all 1,6 billion of them – by EV's. But that requires the maintenance and expansion of transportation infrastructure – roads, refueling stations, bridges, tunnels, parking space, tires, car maintenance etcetera. Apparently, we are not capable of imagining a world with only, say, a few million EV's and an innovative public transportation system that fulfills all our needs. Apparently, we are that obtuse, shortsighted, ignorant and stupid.

It wouldn't make the slightest difference because that's not the point. The point is that we as a species can't think outside of the box on this matter.

'We have cars that are bad. Let's replace them with cars that are good.'

We don't think:

'Our system of transportation is fundamentally flawed. We should rethink it before we start replacing it.'

In situations like this we must also ask *cui bono?* ('who benefits?'). The automobile and transportation industry wouldn't want their world to shrink to zero, now, would they? They benefit when all vehicles on this planet are replaced by electrical ones. All parties that construct and maintain the transportation infrastructure benefit too. Because they don't have to change, *wé* don't have to change.

But it's too late to think outside the transportation industry box now. We've had our chance and blew it. EV's are not going to save us, they won't make any difference to our fate. EV's are false hope, brought to you by false prophets. And the environment, biodiversity and climate don't look any different when you look outside the window of an EV or outside the window of a combustion engine vehicle. They will deteriorate just the same.

5.12

SM744

Where is the referee or judge on climate change?

We might not recognize it on a daily basis, but there's a battle being fought on the social media and across the news outlets of the world. It's not a battle fought with guns and missiles, but with the semantics of deceit, deception and distraction. I'm talking about the battle between climate change science and climate change denialism.

There is só much knowledge and information about climate change floating around on the internet, that you can find as much 'truth and reality' on either side. As a comment on one of my posts about climate science, reacting to climate change denialism, I received the following response:

"I have seen the exact same arguments in the other direction and facts pointing in reverse. Who is to be believed?" [sic]

This was my response:

"Thank you for asking this important question. Because we hear arguments 'on both sides' and they sound 'equally true and real'. How to tell who's right and who's wrong? Well, actually, we can. But it depends on two particularly important questions:

1 – *How do we determine what is true and real?*

2 – *Who do we appoint as referee?*

When we play a board game like, say scrabble, we all adhere to the rules. Before we start, we implicitly agree on what's allowed and what's not. You can't say, halfway through the game, that, for instance, surnames, by names or pat names are suddenly allowed.

Same goes for, say, a soccer game. We accept the rules of the game and we accept the referee enforcing them. You can't suddenly shout across the field that the rules for offside are not applicable to you. Or look at the courts of law. We have to live by the laws of the land and when in court we must accept the rulings of the judge and jury. We can't say 'Objection, your honor! I can do whatever I want because I am above the law'.

Well, if we agree to that, we also must agree to the fact that our disputes on climate change need a referee or judge too. That entity is called *science and the scientific method*. It's the only thing we've got to come to a workable model of the observable reality. The moment someone blurts out that 'CO₂ doesn't have any effect on atmospheric warming', or 'there's only 0,04% of CO₂ in the air; what harm can it do?', or 'the Middle Ages were very cold', or 'in 1976 it was also very hot', science, the scientific method and the scientific community must be our referee and judge,

As board games, sports games and court trials require rules, referees, judges and juries, so does our debate on climate change. Without an objective frame of reference, without a science referee or judge, we are subject to arbitrariness, subjectivity, denialism, framing, prejudice, bias and lies. It's the only way to

counter gut feelings, conspiracy theories, pseudo-science, quackery, shortsightedness, ignorance and stupidity.

Just remember: without science and the scientific method we would all still be circling the central pole of our village seven times a day to beg our deities for good health and a fruitful harvest.”

T h e N e x t S t e p : C o l l a p s e A w a r e n e s s

Chapter 6

The climate collision

6.1

SM653

We'd better batten down the hatches and buckle up

If you follow me here on LinkedIn, or have seen my posts in passing, you probably noticed me repeating myself:

- ‘We’ve passed the elbow of the exponential curve’
- ‘The atmosphere, biosphere, lithosphere, hydrosphere and cryosphere have entered a state of cascade failure, the precursor to suprasystemic collapse’
- ‘The jetstream is meandering, the oceans are overheating, acidifying and deoxygenating, the ocean currents are destabilizing. These are Earth’s main Management and Control Systems that don’t have an on/off switch, or a reset button, or an edit/undo function’
- ‘Environmental pollution, biodiversity loss and climate change are mere symptoms of overshoot or overconsumption, when a population exceeds the carrying capacity of its habitat’

— ‘Overshoot is always met with collapse. It’s locked into the system. For us that implies the collapse of our suprasystemic infrastructure’

— ‘Societal collapse is not like a meteorite strike or a nuclear bomb. It will take another 3 or 4 generations, say another hundred years or so, to take its full effect’

— ‘We, that is to say, this generation, will already witness the beginning of the end, our children will live on the brink of hell and our grandchildren will inherit a world devoid of prosperity and wellbeing’

— ‘We think it can’t happen to us, because we are the dominant species on this planet. We think technology is going to save us. That is a delusion, a pipe dream’

— ‘99% of all species that ever lived on Earth have gone extinct. We’re the only ones accelerating our demise. How insane is that?’

— ‘We do not deserve the designation *Homo sapiens*, ‘the wise, modern, thinking man’. We truly are *Homo infantilicus*’.

Doomsday Speak? End of the World Rhetoric? Needless Panicking and Fear Mongering?

Perhaps.

However, if you want to know what it actually looks like when we pass the elbow of an exponential curve, what it actually means when our living environment enters a state of cascade-failure and which signs to look out for when our societies start to collapse, then please take a look at the attached figures.

There you have it, people, and there you go. That's the signature of suprasystemic collapse. Those are the facts and figures that predict what is coming our way. We'd better batten down the hatches and buckle up. The Perfect Storm is coming. And most of us don't have a clue what that means.

6.2

SM690

About our depth of interest and our shortness of memory

There! COP28 is over. For those who are not at all interested in the environment, biodiversity and climate, read no further. For those who don't know what 'COP' is, click here:

https://nl.m.wikipedia.org/wiki/Conference_of_the_Parties

More than 70,000 people have flown to the oil state of Dubai to attend a climate conference, along with thousands of lobbyists and shareholders from the fossil fuel industry and chaired by an oil sheikh.

Long story short: nothing has changed! That is not what they themselves say, because it is seen as a huge victory (over what, you wonder) but that is not what I want to convey here. Environmental pollution, destruction of biodiversity and climate change are symptoms of overshoot or overconsumption, when a population exceeds the carrying capacity of its habitat. It's the One Truly Major Existential Problem we have and it should be the only thing we all talk about. Because it threatens the way we live and work together for everyone on this planet.

And it's going to change our lives drastically, not in 1,000 years, or in 100 years, but in the next 10 years. I don't think we fully understand what is coming our

way, what collapse truly means. And we are completely unprepared for it. There has been enormous fuss about the results of the 28th climate conference in as many years. But it has already completely disappeared from the news cycle. I just looked at NU-nl and this is what I saw:

- *'Almost all salaries will increase in 2024'*
- *'Putin says goals in Ukraine unchanged'*
- *'Extremely expensive Ferrari runs red light and rams car in China' (video)*
- *'Join the conversation about your menstruation cycle'*
- *'Van Bommel did not cheer at the winning goal against Barça'*
- *'Oprah Winfrey has lost a lot of weight'*
- *'Actress Tiffany Haddish charged with driving under the influence'*

Perhaps it has to be that way. That we are succumbed to an endless stream of news that confirms our current lifestyle, while all existential threats are weighed as heavily as trivial news facts about pop stars and football players and the most despicable habit of the human species: waging war based on territorialism and intolerance.

Perhaps it has to be that we will continue to consume until the very last moment and continue to fool ourselves, hoping for a good outcome, because our technology will save us or because it may pass by all by itself (because climate change is a hoax by the left-wing elite). Perhaps.

But I never thought that in my lifetime I would see that the collective behavior of the human species would not only bring us all to the brink of the abyss, but also, already within the next decade, take us that last brave step forward.

6.3

SM698

How to achieve world population decline for free

Somebody wrote a post about the progress being made on the development and deployment of renewables technology, that we were ‘moving in the right direction’, but that it wasn’t ‘moving fast enough’ and that we needed to ‘accelerate the international efforts to speed up the process’ in order to ‘avoid the world rising past the Paris agreement of limiting global warming to 1,5C compared to pre-industrial levels’.

This was my response:

“Hear, hear! I concur. But why not crank it up a notch?”

Let me stick a big needle in the butt of the elephant in the room to make him actually trash the furniture, smash the walls and make the ceiling come down. This is what we actually need to do to clear up our mess:

- 1 – *All poor people must remain poor*
- 2 – *All rich people must abdicate their wealth*
- 3 – *Population growth must become population decline*
- 4 – *Economic growth must become economic decline*
- 5 – *We all must decrease our income by 20%*
- 6 – *We all must give up 50% of our savings*

7 – We all must go in complete lockdown for another 10 years

That is the energy equivalent of the collective effort of the human species to actually do something about our existential predicament, instead of making it worse at every turn. Currently there's no global initiative that even comes close to my 'list of seven'. Current world population stands at 8 billion people, growing with 1% yearly to 10 billion in 2050. If we could somehow revert that 1% growth into 1% decline, we would reach 6 billion in 2050 (a good start) and 1,3 billion by the end of the next century (the ideal number).

If we don't decline voluntarily, suprasystemic societal collapse will do it to us for free.

Problem solved."

6.4

SM710

It didn't have to be this way, but it did anyway

I saw a post from an organization dedicated to 'fighting climate change' and 'creating momentum to win the battle against global warming', as if it were a war strategy against a cloaked enemy. There was one sentence that struck me, after ploughing through yet another variation of the *'the situation is bad – but it's not too late – we can still fix it- bit we have to star now – and all work closely together'*-mantra:

'It doesn't have to be this way'.

This was my response:

Really? That's it? Are you folks really this obtuse? Who's still saying that? *Of course* it doesn't have to be this way. But we've been saying that for over half a century now, with 28 COPs failing to fix anything. So, it doesn't have to be this way; sure, but we let it become this way anyway.

'If we act now...'

Can somebody please give a definition of 'acting now'. What is 'acting'? Sure, it translates as 'doing something', but what, for Pete's sake, is actually being done here? And what is 'now'? Sure, 'now' means 'at the moment', 'at present'.

But we're not acting in the here and now, everything is planned for the 'there and later', for 2030, 2040, 2050, 2070, 2100.

'...we can still meet the mark'.

What mark, for crying out loud?!

- *Global greenhouse gas emissions? Going up.*
- *Global atmospheric greenhouse gas levels? Going up.*
- *Global average surface temperature? Going up.*
- *The Earth's energy imbalance? Increasing.*
- *The GWP, the sum of all GDPs? Going up.*
- *World population? Growing with 1% each year.*

What other 'marks' do you want? What more is there to measure? You folks really got to wake up and smell the coffee: the reality of your project seems to me to be completely disconnected from reality. If that's the way you want to 'fight the enemy' and 'win the battle', you've got another thing coming.

6.5

SM724

We had our chance and blew it

I encountered someone in my timelines that appeared to be an incorrigible optimist. Like I was in 2015, when I published my 5th more hopeful book about the future of mankind. He was passionate about ‘the ultimate transformation’, the ‘radical change that the further development of renewables technology was going to bring us’ and ‘the global momentum that was growing to reach a green, durable, degrowth human society’. It was all magnificent, brilliant, hopeful, beautiful, intense, superb and lovely. I’m not even exaggerating here.

This was my response:

“Thanks a bunch for your passion and your optimism. Unfortunately, I don’t share it, as you undoubtedly have seen from my books, articles and posts. Here’s some fun facts on a global (!) scale:

- *We burn 100 million barrels of oil daily, along with 22 million metric tons of coal and 11 billion m³ of natural gas.*
- *We produce, also daily, 190.000 non-electrical vehicles, 1 million metric tons of plastic, 5,5 million tons of waste and 11 million tons of cement.*
- *Global CO₂-emissions of fossil fuels and industry were 37,5 gigaton (Gt) in 2022, an all-time high. This year we’ll approach 39 Gt, an all-time high, rising to 43 Gt in 2050, an all-time high.*
- *Atmospheric CO₂-level is at 420 ppm, rising to 500 ppm in 2050 (preindustrial levels were 280 ppm).*

If you want to achieve ‘total system change’ and a ‘complete and utter transformation’, you will have to gather 1 - 2 billion people in your flock, scattered around the globe, all with different social, cultural, political and economic vested interests. That implies, that you would, on average, have to select and assemble 5 to 10 million passionate people per country. But currently a completely different kind of mob is being gathered. Because the entire world is tugging to the (extreme) political right. That couldn’t come at a worse time, because climate change denial is rampant within those movements.

Apparently, we as a species are so dissatisfied with our lives, that we can’t think of anything else than deny reality and choose for political leaders that encourage anti-science in general and climate change denial in particular whilst promoting intolerance, bigotry and misogyny along the way.

It’s the wrong mob, it’s the wrong momentum and it certainly is the wrong direction. I’m afraid it’s the nature of the beast *Homo sapiens*, ‘the wise, modern, thinking man’. I believe we no longer deserve that designation. We should all be relegated to the designation ‘*Homo infantilicus*’. Because I swear, when push comes to shove, it will not be environmental pollution, biodiversity loss or climate change that will do us in. It will be sheer ignorance, shortsightedness and stupidity.

So, no. We can’t make that ‘ultimate transformation’ anymore. We’ve waited too long, I’m sorry to say. We had our chance and blew it.”

6.6

SM734

The magical year 2050

A saw a post referring to an article with the following header:

‘The 10 big US cities where climate change is likely to wreak havoc by 2050’

This was my response:

“Each time I see the year 2050 accompanied by the preposition ‘by’ I have to chuckle a little bit. Don’t get me wrong, I’m not being disrespectful or funny. Perhaps it’s not a chuckle, but more of a derogatory snort. And please, don’t get me started on the adverb ‘likely’. I mean, for Peet’s sake, LIKELY?! Have we lost the ability to simply look outside the window to see what’s happening right nów?

(I told you to not get me started)

What is this obsession with years that neatly end in a zero? Do we think that something distinctive is going to happen at the exact moment we go from 31-12-2049 at 23:59:59 to 1-1-2050 at 00:00:00? Some kind of WHACK, CRACK or WHAM? Climate change is not going to wreak havoc in 2050, 2040 or 2030. It’s already wreaking havoc right nów and it is accelerating. There are no distinct, specifically marked phase transition moments in an exponential curve.

Accelerated global warming doesn't mean that it will be twice as bad next year; it will be ten times as bad. The year after things will be a hundred times as bad as this year. Now what do you think will actually happen by the time we reach the year 2050? The title of this article should have been:

'The 10 US regions that will have become inhabitable way before 2050'

6.7

SM743

The dirty tricks of the climate change denialism movement

I regularly encounter climate change deniers in my timeline. It's unavoidable because I regularly write about climate change. They are attracted to it like flies to a cow pat.

I know I shouldn't engage them, because the effort is futile, especially on the social media where a dialogue more often than once deteriorates into an exchange of monologues going off track, ending in ad hominem attacks and blocking, leaving both parties behind in their own isolated echo chambers. But every once in a while, I can't help myself. This time somebody wrote, after I pointed him to actual climate science facts and figures:

“I am not disputing that the climate is changing, it always is, but CO₂ only plays a nearly negligible role in that.”

There you go, there it is. I responded as follows:

“I'm sorry, you have been successfully bamboozled by the climate change denying industry. Besides, I have shown you an abundance of evidence and you have completely ignored it. That is simply because the climate change denying industry has told you to do so.

Their instructions are simple:

- 1 – Don't try to disprove vested climate science.*
- 2 – Don't try to prove your own assertions.*
- 3 – Just sow doubt.*

Easy peasy. And when you execute these proceedings, follow these rules:

- 1 – When you are presented with counter evidence, ignore it.*
- 2 – Keep denying climate science no matter what they throw at you.*
- 3 – Just throw back faulty graphs, cherry picked data and obscure website links.*
- 4 – Deny that you are a climate change denier.*
- 5 – Say that you only follow the evidence and then don't provide any.*
- 6 – Keep repeating false and already debunked claims that climate change isn't human-caused.*
- 7 – Keep saying that the climate has always changed and always will. That's a truism but do it anyway.*
- 8 – Don't forget to refer to the Middle Ages, when it was very cold.*
- 9 – Point to 1976 when it was also very warm.*
- 10 – Say that CO2 is particularly good for plant life.*

Once the seeds of doubt are sown, the poisonous weeds will simply overgrow truth and reality. Job well done”.

I know it won't change anything. But at least I'm doing it for the other readers in the comment thread. Maybe, sometimes, it helps somebody on the edge of truth and reality to not fall into the bottomless abyss of climate change denial. You never know.

T h e N e x t S t e p : C o l l a p s e A w a r e n e s s

Chapter 7

The collapse

7.1

SM664

In the end there's no brick wall to crash into

I saw a post referring to a graph that showed how much 'carbon' we are still 'allowed' to 'burn' before we reach the end of our global budget. Apparently, the amount of CO₂-emission that we have left to 'spend' are getting smaller and smaller. I wonder why that is.

This was my response:

“Nice graphic. Now, please, for the sake of argument, just extrapolate that graph, the rising curve of CO₂-emissions in the same accelerated pace. And then: WHAM—BAM! ...we have spent it all, but still emit 158 million tons of CO₂-equivalent every day. Then what are we going to do?

I've seen so many variations of these kinds of dynamic graphs and they all appear to say the same thing: we're moving faster and faster towards a brick

wall of some kind, and then: BADA-BOOM! ...something explodes or some kind of earth-shattering event occurs. But that's not what's going to happen at all.

— *Nothing specifically happens on the moment we exceed our carbon budget spending limit.*

— *Nothing specifically happens on the 31st of December 2049, when the clock goes from 23:59:59 to 00:00:00 on the 1st of January 2050. Or 2100.*

— *Nothing specifically happens when we go past the 1,5C global warming marker. Or 2C. Or 3C, 4C, 5C...*

We'll just have moved up the exponential curve of suprasystemic collapse a little bit further, worsening our chances to maintain a stable infrastructure to allow our civilization to survive. We'll just have made it a little bit harder to remedy the situation, to allow some kind of damage control.

In the end, when push comes to shove, there is no brick wall to crash into, no specific physical marker, there's only various aggravated levels of collapse, misery and suffering.

7.2

SM704

What will happen to us, our children and our grandchildren

I have done it again: I have predicted the future for us, this generation, for our children and for our grandchildren. And it doesn't look good. Once again, I have been creative with ruler, pencil and eraser, see attached. This is the 6th time I've done it, each time based on different charts and each time I have reached the same disturbing conclusions. To make that journey with me we'll work in steps.

Step 1 – Please take a look at the first graph attached, the 'Monthly ECMWF ERAS Global Surface Air Temperature Anomalies from 1850-1900 in degrees Celsius'.

<https://www.demensalsgrens.nl/grafieken/>

I have taken that graph as starting point. Now look closely at the line drawn through the monthly measurements. That is not a straight line! It is an accelerating curve. So, I have simply extrapolated the 'bend' of the curve in 7 warming scenarios and plotted that on the extended timeline to the end of the century.

Now, what kind of conclusions might we draw?

Step 2 – The temperature we reach in certain years

Based on the middle scenario (D) we'll reach 2.3C of global warming in 2050, 2.75C in 2060 and 3.25C in 2070. By 2100 we'll reach almost 6C, at which level organic life on land and in the oceans can no longer be maintained. But in the worst-case scenarios (F and G) we'll reach hell on earth already around 2070 and pass the extinction threshold around 2090!

Step 3 – Years we reach certain temperatures

Another way of looking at it, is predicting when we'll reach certain temperatures. In the middle scenario (D) we'll reach 1.5C in 2028, 2C in 2042, 3C in 2065, 4C ('hell on earth') in 2082, 5C ('extinction threshold') in 2093 and 6C ('extinction level event') in 2101. But in the worst-case scenarios (F and G) we'll reach hell on earth already around 2075, pass the extinction threshold around 2080 and experience an extinction level event around 2085! That's well within the boundaries of this century and well within the lifetimes of our children and grandchildren.

And that takes us to:

Step 4 – Consequences for us, for our children and grandchildren

If you are born around 1960, as I am, you'll see the beginning of the end, but probably won't see temperatures cross the 2.5C threshold, passing away between 2040 and 2050. Our children however, born around say, 1995, will live on the edge of hell and see a runaway climate run amok by the time of retirement, between 2055 and 2065. But our grandchildren will inherit a world devoid of prosperity and wellbeing. They will witness the full impact of

accelerated warming, experience a 'hothouse earth' at retirement (between 2085 and 2095) and pass away during suprasystemic collapse (between 2100 and 2115).

But that's only in the mildest scenario A. From scenario B onwards our grandchildren won't stand a chance. They will witness only devastation, destruction and extinction.

There you go. It was a lousy job, but somebody had to do it. Accelerated global warming is way beyond our comprehension. We don't have a clue what's coming our way.

7.3

SM715

When ‘excellent progress’ turns out to be ‘excessive decline’

Somewhere around December of 2023, somebody forwarded an article about the ‘excellent progress’ we’ve made in our efforts to mitigate the consequences of environmental pollution, biodiversity loss and climate change. That we shouldn’t lose hope, that it’s not too late, that we can still do something, bit that we have to do it together and really get going this time. Then I looked at the date of the article, because it appeared that this author had some revelation of a recent date, maybe even that same day.

This was my response:

“Thanks for sharing. But have you noticed at all? This article is from November 2021, during COP26. Since that time, we have:

- *Added 114 gigatons of CO₂-equivalent to the atmosphere.*
- *Burned 2,5 billion barrels of oil, 5,5 billion metric tons of coal and 275 billion cubic meters of natural gas.*
- *Produced 4,8 million non-electrical vehicles, 25 million metric tons of plastic, 138 million metric tons of waste and 275 million metric tons of cement.*

In 2022 the CO₂-emissions for fossil fuels and industry were at 37,5 gigaton, an all-time high. This year we’ll reach 39 gigatons, an all-time high. In 2050

we'll reach 43 gigaton, an all-time high. Global atmospheric CO₂-level is at 420 ppm, rising to 500 ppm in 2050. Preindustrial levels were 280 ppm. Safe levels are between 200 and 300 ppm.

That's all business as usual, so, yeah, I think we are making excellent progress in avoiding the overheating, acidification and deoxygenating of our oceans. Excellent progress. The atmosphere, biosphere, lithosphere, hydrosphere and cryosphere have entered a state of cascade failure, the precursor to suprasystemic collapse. The jetstream is meandering and accelerating, the oceans are overheating, acidifying and deoxygenating, the global ocean currents are destabilizing and slowing down.

Those are Earth's Main Management and Control Systems. There is no on/off switch, no reset button, no edit/undo function. So yeah, we're doing just fine. Excellent progress indeed."

7.4

SM727

Crying future victory over a battle already lost

Somebody wrote a post about climate change. It was almost sweet, like global warming was nothing more than a nuisance, maybe even a bloody nuisance, but nothing we couldn't fix with a stiff upper lip, chin up, chest forward and a bit of a brisk walk. I had to say something.

“Good story, thanks for sharing.

You write clearly and distinctly about what climate change is: a combination of factors, the largest of which lies with humans. You also write in a mild, almost optimistic tone. Like 'there is definitely something going on, dear people, and we are looking at it with due attention, but it will work out fine in the end'. (I'm exaggerating to make a point). Be that as it may, your story is incomplete for two reasons:

1 – Climate change is accelerating.

This year is the year we passed the elbow of the exponential curve. Our living environment has entered a state of cascade failure, the precursor to suprasystemic collapse.

2 – Climate change is a symptom.

Environmental pollution, destruction of the biodiversity and climate change are symptoms of overshoot or overconsumption, when a population exceeds the carrying capacity of the environment (*).

The human species has been at it this for over 70 years now and in 2023 we have crossed the line. Collapse is now embedded in the system. I understand that you are not there yet. Most of us are not ready yet or simply do not want/dare to say it yet. It's also quite something to admit that we, as a species, have brought our own living environment to the brink of collapse. But nature is ruthless and completely indifferent to our feelings. She is looking for a new equilibrium, whether we like it or not.

I am not a doomsday preacher or alarmist. The scientific community, nuanced and cautious by nature, is slowly but surely starting to realize that something special is going on this time. That 'special thing' is that global warming is accelerating beyond the point of control. We are too late; we have waited too long and there is nothing more that can be done about it. We've had our chance and blew it. Now we've got to live with it.

I'm sorry to burst your bubble. I didn't mean to piss on your parade. But when we keep crying future victory over a battle already lost, it will only make things worse.”

Naturally I have never heard from him again.

(*). See also Appendix IV.

7.5

SM738

When graphs start to scream at us

Take a look at these graphs, if you will:

<https://www.demensalsgrens.nl/grafieken/>

Scroll through them and every once in a while, click on one to enlarge. Work your way all the way to the bottom and try to let it sink in. Ask yourself ‘what do I see here?’

Most of us have no clue what this collection of graphs is signifying, being all but a small sample of weather and climate statistics from 2023. But it is screaming to us, nevertheless. This is not just a representation of temperatures within a stable system, where values fluctuate within a given set of restrictions. These graphs spell certain disaster all the way!

- *What you see here is a suprasystem — in this case planet Earth with its dominant species Homo sapiens — that has entered a state of cascade failure, the precursor to suprasystemic collapse.*
- *What you see is a suprasystem that is shaking, jolting, vomiting, twisting, jerking, clashing, vibrating and kicking until it violently seeks a new equilibrium.*
- *What you see is a suprasystem that has, up until last year, acted in a relatively stable and predictable way, although getting warmer every year, still remaining within its ‘box of limits’.*

Well, the system has escaped its box! This should scare the bejesus out of all of us, but it doesn't. We don't seem to understand what is heading our way. Not at all. And that is quite disconcerting indeed, because when we pass the elbow of an exponential curve, all bets are off. Events will follow a chaotic totally unpredictable path from here on out.

That is what these graphs are screaming to us.

7.6

SM739

The borderline we can't see

So, what do you do when you become overwhelmed with all the sad news about the environment, the biodiversity and the climate, when it feels like the world is crumbling beneath your feet?

— Some say that we need to pull ourselves together, stay hopeful, gather in flocks and create a powerful global movement to save the planet.

— Some say that we only have to ‘tap into our collective consciousness’ to solve our existential predicament.

— Some say that we should simply replace all 1,6 billion combustion engine vehicles on Earth by electrical ones.

— Some say that we just need to suck all the carbon out of the air and store it somewhere underground.

— Some say that we just need to ‘move away from fossil fuels’ and ‘transition to a brave new green world’ where we can all live happily together for ever after.

[crickets chirping...]

What do you say? To which ‘camp’ do you belong? Because it seems like we have a choice. That we can join either of these ‘camps’ and make it all better. That is human nature too: exceeding the carrying capacity of our living environment for over 70 years and then desperately trying to fix it. But we don't seem to understand what it actually means to be too late. We don't seem to

realize that there is a point in time that we can safely establish the fact that we've waited too long to fix it. That we had our chance and blew it.

It takes time for such a realization to enter our (sub) consciousness, because we will resist it with all our heart. We still protest it, go against it, shake our heads and wave our hands. We will stand up and walk away to do something. In the end it all boils down to the same thing: there is actually a limit to what we can do to our living environment. There's actually a borderline that we can cross, after passing countless warning signs that urges us, shouts to us, to go back before it's too late, that screams that 'if you keep moving forward, there will come a point that you won't be able to reverse course anymore'.

If we then still keep moving forward, in the believe that 'it probably won't be as bad', or let's go and take a look-see at what all the fuss is about', or 'don't believe what the signs say; they're just meant to scare us' — than we pass that borderline that we shouldn't pass. But that borderline is not a brick wall, you see, with a gate in it that says, 'if you enter here, you must abandon all hope'. It's not an impenetrable barrier of some kind. It's not even an abyss, precipice or chasm.

When we keep moving forward past this abundance of caution signs, warnings, emergency lights and sirens, we won't feel a damn thing when we pass the point of no return, apart from a freakishly cold gust of air, chilling us to our bones. We say to each other 'Did you feel that too? That was weird...'. And then we move on... and still don't look back. Because if we did, we would see that impenetrable wall just behind us. But there would be no gate, no door, no window to crawl back through.

7.7

SM748

The perfect storm

I understand all the authors of positively constructive, hopeful and heartwarming books about the rise of renewables technology to prevent the fall of human civilization as we know it today. I used to be in their camp when I published my 5th book about the hopeful future of mankind in 2015. Back then I called myself an *incorrigible optimist*. I even did a TEDx Youth Talk about it in Amsterdam:

<https://youtu.be/bpJiUcwXHDQ?si=9FXM-Gta4yrz6xRF>

And then 2023 came. Last year all climate change statistics began to leave their relatively linear boxes of progress. Not by small margins, but in huge steps. It's downright scary if you see all these statistics together:

<https://www.demensalsgrens.nl/grafieken/>

These authors I now consider to be flat wrong. I was wrong too. I also loved, for instance, the dynamic graphs by Hans Rosling. Until I found out what they actually meant. In his '200 countries 200 years 4 minutes' YouTube video you can see it for yourself:

https://youtu.be/jbkSRLYSojo?si=YbQAC5r_BBqZJtRg

I saw this graph as hopeful progress' but I was utterly mistaken. The rising curve showing 'the world' going from 'poor and sick' to 'rich and healthy' can be matched precisely with the rising curves of overshoot (overconsumption), when a population exceeds the carrying capacity of its habitat. What you see is not progress; it's decline in disguise. It's a disaster happening.

Solar panels, windmills, heat pumps, EV's, in fact all brave new renewables technology — they don't solve the problem, they actually aggravate it. None of it has had any effect on rising global greenhouse gas levels, average surface temperature and the Earth's energy imbalance (to name but a few).

Global warming is now accelerating. Our living environment has entered a state of cascade failure. The suprasystem is shaking out of control. The jetstream is accelerating and meandering, the oceans are overheating, acidifying and deoxygenating. The global ocean currents are destabilizing and slowing down. These are Earth's Main Management and Control Systems. There is no one/off switch, no reset button, no edit/undo function.

Once a species exceeds the carrying capacity of its habitat for too long, the system collapses. That's a law of nature. We have waited too long, wasted too much time writing and talking about it. We had 28 COPs and still all the global warming KPI's went up. Who are we kidding? Our civilization as we know it today is doomed. It's better to be perfectly honest about it and create a sense of urgency that way, than spreading the false hope that technology is going to save us. It's not. Our technology only makes it worse.

Stop electrifying our societies! The first thing that goes when the suprasystem crashes is electricity. We're completely addicted to electricity; we wouldn't know what to do without it. We'd better move on to a state of *collapse*

awareness and *collapse resilience* in order to eventually reach the state of *collapse acceptance*. Because it's coming our way. We can't stop it anymore. And it will be the perfect storm, everywhere, all at once.

Epilogue

SM575

Why we just can't grasp the concept of 'extinction'

The extinction of a species due to overshoot or overconsumption — when a population exceeds the carrying capacity of its habitat — is an unknown, abstract and insignificant concept. Unknown, because as a species you only experience it once. Abstract, because it falls completely outside one's own experience. Insignificant, because our daily concerns are based entirely on survival and reproduction. As far as we can tell, there is only one species on Earth that is aware of its own mortality: humans. All other species just 'are' and do not know the biological and philosophical concept of 'dying' or 'being dead'.

The human species *Homo sapiens* is still growing in size, currently at about 1% per year. That takes us from 8 billion people to 10 billion in 2050. All those people want to get rich, healthy, happy and grow old. No one wants to decline or reduce. Everybody wants to keep at least what they've got, preferably get a little bit more. That is simply unsustainable.

Environmental pollution, biodiversity loss and climate change are mere symptoms of overconsumption. That has been going on for over 70 years now and is currently accelerating. We have pumped so much greenhouse gas into our atmosphere that 2023 was the year we passed the 'elbow' of the exponential curve, the 'point of no return'. The vitosphere, the joint venture of atmosphere,

biosphere, lithosphere, hydrosphere and cryosphere has entered a state of cascade failure, the precursor to suprasystemic collapse.

The jet stream is meandering and accelerating. The oceans are overheating, acidifying and deoxygenating. The global ocean currents are destabilizing and slowing down. These are the main Management & Control Systems of Planet Earth and they do not have an on/off switch, or a reset button, or an edit/undo function.

So, what does “extinction” mean to us? Well, it doesn’t resemble a meteorite strike or an atomic bomb. It is true that from now on each generation will be worse off than the last, but it will take another three or four generations, let’s say about a hundred years, before the population becomes seriously endangered. But we will make desperate attempts to escape our fate. By closing our borders to inevitable mass migrations. By going to war with other countries to protect our people, our culture and our resources. And by continuing to burn fossil fuels until the very last minute.

This generation – yes, that is *yóu!* – will already witness the beginning of the end. Our children will live on the edge of hell and our grandchildren will inherit a world devoid of prosperity and well-being. Whether we will disappear as a species entirely is anyone's guess. Yet it is good to realize that 99.99% of all species that have ever lived on Earth got extinct. However, we are the only ones accelerating our demise.

And that is why we may no longer call ourselves *Homo sapiens*, 'the wise, thinking, modern man'. We are now demoted to *Homo infantilicus*.

Bart Flos – Helmond | November 2023 – April 2024.

Appendix I

Blurb of ‘Our Inner Limits – On the Unbending Barriers of Being’

Please allow me to introduce: Professor Pels is a scientist and proponent of rational discourse. He embraces nuance and bases his work on observation, research, facts and evidence. Mr. Luis, on the other hand, mainly lets his gut feelings speak. He always tells it like it is, straight from the heart and straight to the point.

What would happen if we pitted the two against each other to discuss the state of the world? About how we live and work together. That we constantly encounter barriers to progress. That division and inequality is increasing. That economy comes before ecology. And that we can now see the destructive consequences for the environment, biodiversity and climate everywhere on our planet.

– *Prof. Pels: 'So you claim that we have no chance of surviving in the long term, that we are doomed to collapse. That's a bit too short-sighted for me. I believe that it is not yet too late, that there are still opportunities and possibilities.'*

– *Mr. Luis: 'Go right ahead, sir. As long as I can say what it really means.'*

– *Prof. Pels: 'Fine with me. Let's agree that you will keep me on my toes while I put people, our organizations and ultimately the entire human civilization under a magnifying glass.'*

– *Mr. Luis: 'Whatever you want. But I will defend my position with all my heart and soul.'*

– *Prof. Pels: 'And I will mine. I suggest we at least start at the beginning.'*

Which of these two gentlemen will be right in the end, do you think?

In *Our Inner Limits*, author, speaker and change specialist Bart Flos assembles and compiles all his previous work. Because whether it concerns an individual, group, society or suprasystem, we see deep traces everywhere with the same signature: that of the social group primate and hunter-gatherer *Homo sapiens*. Are we able to break through the rigid barriers of our existence? We will see.

Appendix II

“What is your book about?”

When people ask me what my books are about, I always refer to the blurb. A lot of time and energy goes into writing a short, powerful summary of your book (see Appendix I).

My book *Our Inner Limits* consists of two parts:

Part 1 – People and Organization

Part 2 – People and Civilization

And it is based on two fundamental paradoxes:

1 – The Collaboration Paradox: we collaborate to fail.

2 – The Existence Paradox: we coexist to get extinct.

I start my journey with the individual and then move through group and society to the suprasystem: Mother Earth and human civilization. That's quite a lot for one book! It is 384 pages, 624 grams 'clean on the hook'. It's quite the journey, but in the end, I hope it's worth the travel.

This is the structure of my book:

Chapter 1 | Context

About the dilemmas, barriers and paradoxes of the nature of the beast: Homo sapiens, ‘the wise, modern, thinking man’.

PART 1 | PEOPLE AND ORGANIZATION

Chapter 2 | About people, groups and behavior

How the individual influences the small social group and vice versa: ‘when you know your small group, you know your organization.’

Chapter 3 | Our organizational dilemmas

How leadership determines corporate culture and that we can learn much more about this by asking ‘why-questions’.

Chapter 4 | The concept of maturity

Why organizational maturity is always about soft skills and never about hard skills: is it okay to be middle-mature?

Chapter 5 | The highly mature organization

What we need to do to solve the collaboration paradox and how we can circumvent the definition of insanity.

PART 2 | PEOPLE AND CIVILIZATION

Chapter 6 | Who we are and what we do

Human progress is not a primary goal, but only a side-effect: are we doomed to get extinct?

Chapter 7 | Our big problems

Why climate change is the clearest symptom of overshoot (overconsumption) and what the world's super-rich have to do with it.

Chapter 8 | The climate confrontation

No climate book, report or conference has ever changed rising greenhouse gas emissions. Why is that and where does it lead?

Chapter 9 | The highly mature civilization

On the suprasystem 2.0: about *neocology* and *neoeconomics* and how to keep your finger tight on the climate pulse.

In *Our Inner Limits* I provide you, the honorable reader, with every opportunity to draw your own conclusions about the nature of the beast *Homo sapiens*. I'm curious to learn what you will come up with.

www.demensalsgrens.nl

T h e N e x t S t e p : C o l l a p s e A w a r e n e s s

Appendix III

The scientific method

Would you like to learn more about the scientific method? Click here:

https://en.wikipedia.org/wiki/Scientific_method

Would you like to learn more about the scientific theory? Click here:

https://en.wikipedia.org/wiki/Scientific_theory

Would you like to learn more about science in general? Click here:

<https://en.wikipedia.org/wiki/Science>

(Source: Wikipedia).

The Next Step: Collapse Awareness

Appendix IV

The concept of overshoot or overconsumption

Environmental pollution, destruction of the biodiversity and climate change are symptoms of overshoot or overconsumption: when a population exceeds the carrying capacity of its habitat. Overshoot is not just beginning. It's been going on for over half a century now and currently in its accelerating phase.

Overconsumption is always met with collapse; it's locked into the system. For us that implies the suprasystemic collapse of the global infrastructure. If you're interested in the concept of overshoot, you might want to study the works of Professor William Rees:

https://en.m.wikipedia.org/wiki/William_E._Rees

[Wikipedia Profile]

“William Rees, FRSC (born December 18, 1943), is Professor Emeritus at the University of British Columbia and former director of the School of Community and Regional Planning (SCARP) at UBC.

Rees taught at the University of British Columbia from 1969–70 until his retirement in 2011–2012 but has since continued his writing and research. His primary interest is in public policy and planning relating to global

environmental trends and the ecological conditions for sustainable socioeconomic development. He is the originator of the "ecological footprint" concept and co-developer of the method.”

<https://youtu.be/LQTuDttP2Yg>

[‘The Fundamental Issue: Overshoot’]

And: <https://youtu.be/U3GB191UDiI>

[‘Will Modern Civilization be the Death of Us?’]

And, if you don’t have that much time to spend:

<https://youtu.be/o3nCFwhV-9E>

[‘What is a sustainable population?’]

Or, if you réally want to do a deep dive into the subject matter:

<https://www.mdpi.com/2673-4060/4/3/32#:~:text=In%20the%20simplest%20terms%2C%20overshoot,ri sing%20incomes%20and%20population%20growth>

[‘The Human Ecology of Overshoot: Why a Major “Population Correction” is Inevitable’]

Appendix V

Useful links

1. <https://climateactionaustralia.wordpress.com/2023/10/19/10-reasons-our-civilization-will-soon-collapse/>
2. <https://collapsesurvivalsite.com/reasons-civilization-will-collapse/>
3. <https://insideclimatenews.org/news/11102023/scientists-disagree-about-drivers-of-septembers-temperature-spike/>
4. <https://www.linkedin.com/pulse/why-do-scientists-make-fuss-1%C2%BAC-2%C2%BAC-increase-average-global-maxton>
5. <https://journals.sagepub.com/doi/10.1177/00368504231201372>
[Scientific study on overshoot]
6. <https://youtu.be/23nDxPSIoAw?si=ojcO51Eg5bwsDeCI> [Jonathan Pie: The World's End]
7. <https://climatechangetracker.org/>
8. <https://climatechangetracker.org/igcc>

9. https://youtu.be/t2C6NfFIK_g [The Anthropocene: where are we going?]
10. <https://youtu.be/pNYp6oc37ds> [The Newsroom: The Climate Change Interview]
11. <https://www.motherjones.com/politics/2014/11/climate-desk-fact-checks-aaron-sorkins-climate-science-newsroom/>
12. <https://youtu.be/ww47bR86wSc> [Bonhoeffer's Theory of Stupidity]
13. <https://youtu.be/8erFXZmp7fo> [Arctic heat is coming our way]
14. <https://youtu.be/Qfo3Uo4rqGQ> [31 logical fallacies in 8 minutes]
15. <https://www.newyorker.com/culture/cultural-comment/what-if-we-stopped-pretending>
16. https://climatereanalyzer.org/clim/sst_daily/
17. <https://youtu.be/ALduFqONN58> [I looked at the recent bird flu data, and now I'm really scared]
18. <https://www-bbc-co-uk.cdn.ampproject.org/c/s/www.bbc.co.uk/news/science-environment-65602293.amp> [About 1,5C of Global Warming]
19. <https://arstechnica.com/science/2023/04/an-ominous-heating-event-is-unfolding-in-the-oceans/>

20. <https://showyourstripes.info/c/ocean/arcticocean/baffinbay>
21. <https://www-bbc-co-uk.cdn.ampproject.org/c/s/www.bbc.co.uk/news/science-environment-65339934.amp> [About the El Niño / La Niña phenomenon]
22. <https://thebulletin-org.cdn.ampproject.org/c/s/thebulletin.org/2023/04/faster-than-forecast-climate-impacts-trigger-tipping-points-in-the-earth-system/amp/>
23. <https://vimeo.com/809258916/92b420d98a> [The dangers of AI (duo presentation)]
24. <https://gml.noaa.gov/ccgg/trends/> [On Greenhouse Gas Emissions]
25. <http://arctic-news.blogspot.com/2023/04/ipcc-keeps-downplaying-the-danger-even-as-reality-strikes.html?m=1>
26. <http://arctic-news.blogspot.com/2023/03/sea-surface-temperature-at-record-high.html?m=1> [Considering this, a Climate Emergency should be declared]
27. <https://www-bbc-com.cdn.ampproject.org/c/s/www.bbc.com/news/world-australia-65120327.amp> [Antarctic oceans currently heading for collapse]
28. <https://indica.medium.com/how-precisely-were-fucked-cad1foe5b068>

29. https://youtu.be/5dZ_lvDgevK [Documentary on AI (2019)]
30. <https://sjgenco.medium.com/ten-facts-humanity-must-face-if-it-wants-to-survive-on-a-livable-planet-5de93b2f4cde>
31. <https://xkcd.com/1732/> [3D Graph Global Warming]
32. <https://youtu.be/LKO7koKh7Nw> [A Life-or-Death Battle | Fight for Your Life | FULL EPISODE]
33. https://youtu.be/IEu-OW9_YA [Tipping point: immanent systemic environmental collapse]
34. <https://youtu.be/x1SgmFaoro4> [NASA | A Year in the Life of Earth's CO₂]
35. <https://youtu.be/nfv7sIL2uKO> [Al Gore on the World Economic Forum (WEF) about climate change]
36. <https://www.climate.gov/news-features/understanding-climate/understanding-arctic-polar-vortex>

T h e N e x t S t e p : C o l l a p s e A w a r e n e s s

In 2015, author, public speaker and change specialist Bart Flos published his fifth book, *Vooruitkijken voor gevorderden* ('Futurology for Fanatics'). In this book he paints a hopeful picture of the limitless possibilities of the human species *Homo sapiens* to shape its own future.

Fast forward to 2022

Since the publication of that book, things have quickly gotten out of hand with the environment, biodiversity and climate. It prompted Flos to write his sixth book: *Demens als grens* ('Our Inner Limits'). It was much less hopeful as a plea, unfortunately, but it still contained solutions to turn the tide.

Fast forward to 2024

"After the publication of *Our Inner Limits*, I could not have imagined how quickly things would get so much worse. The year 2023 is the year that we passed the 'elbow' of the exponential curve. What we are left with now is chaos and unpredictability. I wrote almost a thousand posts about it and I didn't want them to get lost in the endless timelines of our social media platforms," says Flos.

This is one of the eleven addenda to *Our Inner Limits*, in which Flos's posts are included in book form. It takes you on a head-on confrontational journey from ignorance via climate change to overconsumption and collapse. We will break the last ultimate taboo together: daring to say that we have waited too long, that it is now too late and that we will have to suffer the consequences of our destructive collective behavior as a human species.

Want to learn more? Go to www.demensalsgrens.nl