

PLANET PARADISE

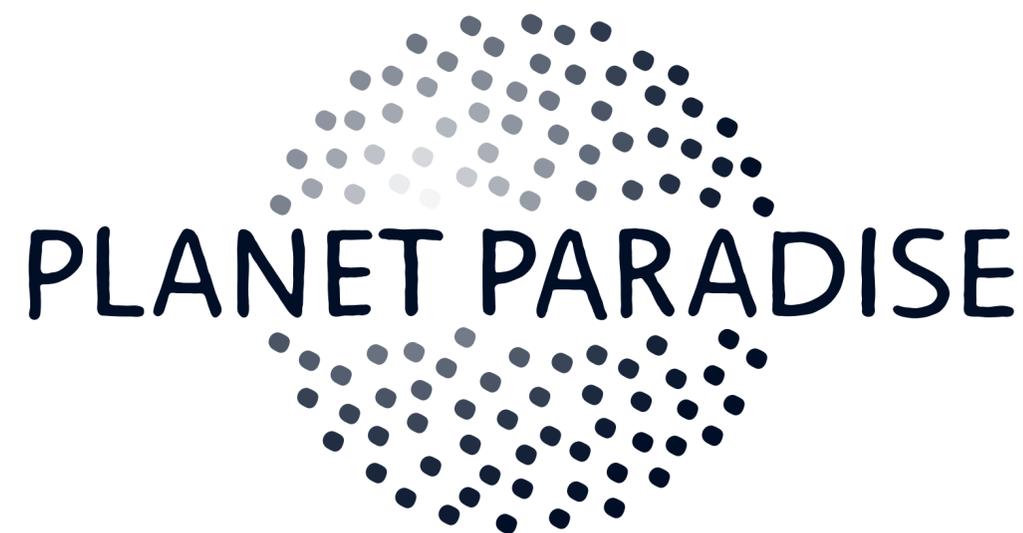
Landscape architect Bruno Doedens was Artist in Residence at the Academy of Architecture (AvB) in 2021. He has a mission. He sees the Earth as a unique and miraculous paradise and calls on everyone to cherish that paradise in his essay Planet Paradise. His most important question: ‘How do we reinvent ourselves as an enriching species for the Earth instead of a harmful species?’



editor Rose Casella
final editing Gert Hage
editing Jacques Poell
translation Richard Glass

www.brunodoedens.nl
www.planetparadise.nl

The essay Planet Paradise was made possible by the Artist in Residence (AiR) programme of the Amsterdam University of the Arts (AHK). With thanks to initiator Hanneke Kijne (AvB).



Bruno Doedens

1st version 2021
2nd version 2022

Foreword

'Planet Paradise' is a personal quest to find out how I, as a human and artist, can relate to the bigger context, 'the Earth', in these uncertain and turbulent times. What do I need to do and what not? All my working years, I have allowed myself to be swept along by the stream that is called progress. As with many people who grew up in the West, that stream provided me with a prosperous, pleasant and optimistic life. I have recently realised that life has a downside.

The progress of humankind is namely at the expense of the miraculous, ingenious and beautiful Earth system that we call Gaia. Whether the average temperature on Earth rises by one and a half degrees Celsius, four degrees Celsius, or somewhere in-between that, it is clear that the careless, indifferent way we deal with nature has far-reaching consequences for our Earth system. For a long time, I took part in that unconsciously. I can feel guilty about it, but at the

same time, I know that a feeling of guilt solves nothing. And how guilty am I? I certainly knew on some level, of course, that we were on a dangerous road. However, it never went further than that, as is the case for almost everyone. I did not attach any consequences to the dormant awareness that the way we have designed our society burdens the Earth too heavily and leads to increasing inequality.

It is high time to reinvent myself as a citizen, landscape architect, and artist. But how do I do that? In my case, by delving into the topic thoroughly. I read piles of books wherein scientists and journalists look back on and look ahead to the ecological consequences of our actions - books about the creation of the cosmos, the future of our planet, the collapse of nature, and concrete guides for a new, sustainable way of life. After reading stacks of books, I realised that our present situation is more urgent and troubling than I had suspected. I have rudely awakened from my standby mode and realised that we no longer have any more time to lose.

In writing this essay, I have made use of the insights of academics from all kinds of fields, from philosophers to biologists. However, I realise only too well that the topic is so extensive and has been written about, researched, and argued to such an extent, particularly in recent decades, that it is impossible to sketch an objective, all-encompassing picture of the situation. Nevertheless, I have tried to do so while fully aware that my choices reflect my perspective and preferences.

I have always been close to nature and call myself a 'dreaming realist'. I believe that healthy doubts are of great value. And I am an optimist. I believe in the opportunities that the future offers. Even a tragedy provides opportunities. But even an optimist can sometimes be overcome by a feeling of despondency if he sees how little we know ourselves and how negligently we continue to treat the Earth, despite climate agreements and good intentions. However, waiting hopelessly for the pessimistic future scenarios to come true will not benefit anyone. It is late, to be sure, but not too late. Let's pull our sleeves up. There's so much we

can do, and there are so many of us. We need new stories, stories that shake us awake, persuade and encourage us to act differently and relate to each other, the natural world and our unique Earth differently. Stories that create room for imagination and build bridges to a new future.

The miracle Gaia

A small blue-green, ingenious ball of miraculous beauty floats in a remote corner of the infinite empty universe. And on that ball, there is life. As far as we currently know, it is the only one of its kind in the cosmos, and we are living on that very ball. We are part of the amazing story of the Earth system that we call Gaia. For 4.6 billion years, the evolution of the Earth has spawned all life in an extraordinary process of matter and natural forces, with the sun as an energy source, precisely at the right distance. A uniquely cohesive, complex, and miraculous series of intertwined ecosystems constantly changing over time. Complex feedback mechanisms connect and stabilise the four atmospheres of the Earth's system: geosphere, atmosphere, hydrosphere and biosphere. Together, they create and determine, to a large extent, the possibilities for all life forms.

The four Earth systems are fluid and move in different time cycles; nothing remains as it was. We understand the

lengthy process of plate tectonics (shifting continents) and the equally slow limestone and rock cycle. And we know the evolution of unicellular organisms via multicellular organisms into the current complex biosphere happened over billions of years.

Since life has been on Earth, many species have come before us, and many more species will come after us. Humankind will probably soon prove to be a footnote in the history of the Earth. The Earth can survive without us, but we cannot survive without the Earth. It is good to realise that the Earth will continue to change and ultimately finite itself. It is beyond our imagination, but in a similar period, the Earth will be scorched by the increasing force of the sun that will ultimately explode. At the same time, new solar systems will probably arise in other places in the infinitely large universe, with new planets. With or without living beings, who knows?

Young and successful

Humans are a very young species, still ‘adolescents’ - a small branch on the tree of evolution, the thickness of the layer of paint on the top of the Eiffel Tower. Homo sapiens, more akin to all other living organisms than we often think or perhaps would like to think, have only existed on the 4.6 billion-year-old Earth for 200,000 years and converted into length: 20 centimetres within 4.6 kilometres. We have been living in the Holocene for 10,000 years, an interglacial period, with a climate that is exceptionally stable and favourable to humankind. In the past 10,000 years – the last centimetre – we have developed from solitary hunter-gatherers living in and with nature to city dwellers connected with the whole world. With each step that was taken, our distance from nature became greater.

Following a very gradual growth – around the year 0, there were estimated to be 150 to 400 million people. In the past 50 years, the global population has exploded from 3.5 to

almost 8 billion. That is more than 2,000 times as much compared to 2,000 years ago. The favourable climate, the extermination of our natural enemies, the ability to cooperate with large groups, and the technological and scientific developments were the most important drivers for the success of the human species. The rapid population growth went hand in hand with an explosively rising demand for nutrients and food products, materials and items. The direct consequence of this has been a massive seizure of raw materials and the cultivated area of the Earth’s land surface at the expense of the natural ecosystems and biodiversity.

A new biotope

With our intelligence and talents boosted by science and technology, humanity has spun an immense ‘human web’ around the Earth in the last two hundred years – and the last fifty years in particular. A new, wondrous artificial world, a

new 'biotope' – a 'technosphere' – has been added to the living Earth. It is a cohesive, intricate and complex layer of rapidly-expanding urban development and industrial and agricultural areas, connected by quality infrastructure, both physically and digitally. It is a layer in which human activities and physical laws merge, a layer in which humankind has created its own world, which seems to be completely separate from nature, with technological innovations and developments. It all takes place in the outermost thin layer around the Earth, only a few kilometres thick, which was called the 'critical zone' by the philosopher Bruno Latour.

In this dominant and dense biotope, which is developing ever more rapidly and ever further, humanity has become a significant geological force in the evolution of the Earth. The Earth's system must respond to all that human force. You could say that the Earth has gone from a stable 'dance floor' to an active 'dance partner'.

In the meantime, we have come up against the boundaries of what the Earth can cope with, even if the opinions about

that are divided. To some, the process is irreversible, and we are wilfully heading towards an ecological disaster that we ourselves have caused. Others wonder whether this period may just be a logical intermediary step in the evolution of the Earth. In any event, the fact that nature is behaving increasingly erratic is indisputable; the storms are more severe, the rainfall more abundant, and the periods of drought longer. Welcome to the Anthropocene, the human epoch.

Careless and indifferent

There are more and more of us, we have more and more things, and we want even more – the past five decades, in particular, we have been living in top gear. It will continue until we all unintentionally spin out of control while partying if that point hasn't already been reached. Everyone knows the consequences of our thoughtless, unsustainable actions:

the enormous pollution of air, water and soil, the rapid loss of biodiversity, the depletion of natural resources, the loss of woodland and other nature conservation areas, desertification, and so on. Would we accept it if another species would treat the Earth in this way?

It is not as if we couldn't have known all this. Almost fifty years ago, scientists and experts warned us about the consequences of excessive consumption. Why have we ignored the signals and pushed down the road towards more growth, more cars, more holidays and more items? It seems somewhat likely that we have arrived at a point where the complex Earth system has been pushed over the self-regulation threshold through our actions. No other animal species has ever managed to do that before. And that entails major risks for us. We appear to be slowly realising in the year 2022 how unique and vulnerable our planet Earth is and how special it is to live on that small, blue-green ball. And at the same time, we are also the last generation that can do something about the destructive effects of our careless, juvenile, irresponsible and indifferent interaction

with the Earth. We are destroying the dance floor on which we are dancing! That carries with it a great responsibility. But suppose that we want to do the right thing for ourselves, our fellow inhabitants and the Earth: what must we do then? And who must do it? Can we rely on technological developments and innovations? Are artificial intelligence and biochemistry the solutions? Or do we need to learn to look differently at the Earth and how we have designed our society?

The butterfly and the hurricane

As an optimist, I believe we are late, but not too late. New technologies and understanding the miraculous natural world and its laws better can contribute to solving the big problems we are facing. Examples include developing new forms of sustainable energy, 'cleaning' all production processes and converting waste flows into raw materials.

However, as individuals, we can and must contribute to the transition ourselves. Eight billion humans, increasingly connected, represent a gigantic social and creative capital together. The challenge is to use this capital actively for the required transition. In addition, there is an even larger and more essential issue at hand: will we be able, with the knowledge that we now have, to relate to the Earth and nature in a different, more prudent way? What is our new role in evolution? And what is our relationship to the bigger scale, the cosmos? The philosopher Bruno Latour rejects the distinction between humans and nature and between nature and culture. Should we still actually use the term nature so long as we do not want to, or cannot, see humans as part of it? The answer to these questions will be a determining factor in terms of how we think – and therefore act! The core of the problem and the solution may lie here. The miraculous transformation process from caterpillar to butterfly is an appropriate metaphor. Imagine that we are the caterpillar cells about to pupate. In that case, we can see the world as decaying, destructive and without expectations for the future. However, we can also see it as the start of a new

world, the new expectant world of the butterfly. Just as death is necessary for life and spring follows winter, a caterpillar is essential for a butterfly.

Let us stay with the butterfly briefly. According to the standard story, we as individuals are small and insignificant in light of life's major events, a minor link in the series universe-biosphere-society-individual. But can a butterfly also cause a hurricane, and doesn't the system work in both directions? Or rather: are we passive, and do we merely endure what life throws at us? Or are we active, and do we partly influence the direction of the future? 'Whoever saves one life, saves the world entirely', as a Jewish saying goes. Freely translated, you could say that whoever manages to convince one person convinces the entire world.

We are capable of a lot together. If we can make the world poorer with all our talents, creativity and intelligence, we can also make it richer. It's our choice. Or, as James Lovelock argues: each species partly determines its own living environment. That sounds abstract, just like 'searching for

a connection with nature, with the non-human and with the Earth.’ But if we look further, it is very concrete. We can make numerous links between humans and the universe, which we are simply unaware of. Without iron atoms created by planetary processes, we cannot absorb oxygen in our bodies. We wouldn’t have any oxygen if bacteria and later plants did not learn to convert CO₂ into O₂ via photosynthesis. And with our miraculous and creative minds, we can keep creating unfamiliar connections that add new ‘ideas and colours’ to the world. Our creativity can open and imagine new, unknown worlds. That offers opportunities for the future.

We may intuitively know that everything is connected with everything else, but this is increasingly being substantiated by scientific research in physics. It appears increasingly clear, for example, that there is a continuous exchange of atoms, the building blocks from which we are built; that matter and energy are actually the same. We eat, drink, and breathe. In this way, we are constantly refreshing ourselves. What was once a plant becomes part of our body and something

else later. We are the Earth, and the Earth is us. And that also seems to apply to our thoughts and our consciousness. Through quantum physics, there are more signs that everything is much more strongly connected with everything else than we already knew unconsciously. More and more often, science and various forms of age-old spirituality follow each other and increasingly converge. That will, of course, influence our view of the Earth, ourselves and our fellow Earth inhabitants. It is an interesting and encouraging thought that new scientific knowledge will reinforce our deep connection with planet Earth and all life, as Fritjof Capra already argued in his book *The Tao of Physics* in the 1970s.

The power of stories

Humans are a linguistic animal species. We tell stories, listen to stories, make up stories, laugh about stories, drown in stories and believe in stories; we are stories. Stories

give us belief in God and belief in money. We believe in heaven and hell, even if that belief is waning, as opposed to our unshakeable faith in the story that money – paper or digital – represents values to be used to exchange and trade. It is a belief that drives our global economy to a large extent. Borders, ranks, classes, progress and an inexhaustible Earth are mere stories that we believe in

The most recent belief is the omnipotence of data, social media and artificial intelligence. We believe in short term individualism and self-interest. We believe in all of that because we have been told that it will make us richer and happier. We live with the stories we have created ourselves; they spawn and determine our world. Stories are responsible for who we are and how we behave towards each other, nature, and Earth. Stories have primal power and creative power.

We don't always tell the same stories; they change with time. We were once led to believe that the Earth was flat. Now we know better. Stories adapt because we have

more knowledge and make discoveries. Or because they simply turn out to be incorrect. Such as the story about the inexhaustible Earth. We clung to that for a long time, too long. It is time for a new story—a story about the beauty of the Earth and nature, about living in harmony with Gaia.

Not words but deeds

The good news is that the first paragraphs of that new story have already been put on paper. The impetus for that was given by the Club of Rome fifty years ago. Things remained quiet for a long time following their alarming report, The Limits to Growth. Yet, in the past decade, agreements were finally made about poverty policy, education, equal rights, clean energy, climate, peace and cooperation by international institutions, such as the Intergovernmental Panel on Climate Change (IPCC) and the Sustainable Development Goals. The high point to date has been the

Paris Climate Agreement of 2015, in which 194 countries are cooperating to combat further global warming. The recent New Green Deal of the European Union to make the economy and society more sustainable is also a fine example. In addition to these great efforts, thousands of other bodies, organisations, and companies are working actively to ensure the transition to a sustainable world is a success.

Furthermore, an increasing number of citizens, particularly young people, want and are demanding change. They no longer believe in the story that ever-growing wealth and prosperity leads to more happiness and equality and are more and more convinced of the necessity of a sustainable life. A life in which the Earth is no longer seen as a production factor, a life where there is also respect for each other and nature.

However, the voice of the apostates who have abandoned the belief in progress is not yet powerful enough to provide the transition with the necessary momentum. How can

you accelerate this process, preferably in a hopeful and pleasant way? How can we stimulate the desire for change, for a stable future? We know the list of social and individual forces and emotions that can drive changes, such as fear, anger and injustice, temptation, self-interest, innovation, imagination, and idealism. They are consciously and unconsciously used to influence and accelerate processes, often in the interest of companies or countries, rarely in the interest of the Earth. Technological developments and innovations, and listening better to nature – our only example – and the physical laws can also help us with the process of change, as can getting to know ourselves better and listening to and learning from each other. And let us not forget learning from plants and animals too. Examples of this include the intelligent communication system of trees.

There are more than enough examples. In numerous countries, the transformation from fossil to clean, renewable energy is taking place. Deserts are being made liveable again through planting and regeneration. Costa Rica is stimulating rewilding, while Singapore is bringing nature to the city.

Unfortunately, however, just as many examples are slowing down the transition – due to a lack of interest, ignorance, or enlightened self-interest. They are clinging, against their better judgement, to the story of the inexhaustible Earth and are delaying the transition from ‘dirty’ to ‘clean and sustainable’. How on earth is it possible that we still tolerate factory farming in the year 2022? How intelligent are we if we deny the link between intensive livestock farming and viruses that are dangerous to humans?

“It begins with limits-to-growth-discussion”, said the Dutch Professor of Virology Marion Koopmans. “How much should we want to travel? How much meat should you want to keep eating? Please let’s not return to business as usual after this coronavirus crisis. We really need to think things through more carefully: what are the consequences of our actions?”

Everyone is actually in the same boat at the moment. Rich countries want to maintain their standard of living and must reduce their ecological footprint. Developing countries want to raise their standard of living without increasing their

environmental footprint. What can they learn from each other? We must act differently and quicker, but the urgency to truly change and to take action today is still felt by too few people. Do we need an even bigger crisis to convince people? A complete disaster? Or can we perhaps get people, companies and institutions to look at the world differently with new stories before it reaches that point? If the stories determine our actions, we need to search for inspiring stories that fuel the desire for change, that persuade us and put us on a sustainable track, leading to a just and fair division of sources, opportunities, and chances.

We don’t know what we don’t know

Objective truth does not exist, that much we know, nor does objective knowledge. That also applies to the field of sustainability. Our planet is big and extremely complex; there’s still so much we don’t know. For example, how the

Earth's systems – geosphere, hydrosphere, atmosphere, biosphere – with all feedback mechanisms, and the technosphere added to it by us, influence each other precisely. We don't know how technological innovations will make it possible to live with the Earth with eight billion people (or more) in a 'clean' non-harmful way. We barely even know who we are ourselves. And what we see or especially: what we don't see. The light that is visible to us, for example, is only a small part of the entire spectrum, from radio waves to gamma waves. We don't know what we don't see. We don't know what we don't know, and we only know for certain that the prevailing opinions will soon be superseded by discoveries and developments over time.

What will change once we have finally mastered the technology of nuclear fusion? What if it is scientifically proven that all things non-human – a river, mountain range, tree or stone – also possess consciousness and are given the right to speak? What if it turns out that intelligent alien life exists, benevolent or malicious? What if artificial intelligence takes over? What if it turns out that we are part

of the caterpillar that will soon turn into a butterfly? The many 'unknowns' demand a respectful and cautious attitude concerning the miracle of nature and the Earth as a whole. We must learn to listen to that nature again and, above all, continue to marvel with an open attitude at the unparalleled beauty and power of Mother Earth, Gaia, which we are only allowed to be part of temporarily.

The Great Shift: from ego to eco

Our most important assignment is to enrich the ecosystems in the same way that plants, animals and organisms do. That assignment begins with knowledge, and an understanding and overview of nature, from small to big. We can learn a lot from it if we are at least open and willing to change our 'ego'-consciousness into an 'eco'-consciousness, into 'Earth'-thinking, into recognition that we are also nature.

The assignment is to connect that eco-consciousness with our knowledge of the Earth. How can we connect the ‘thinking in our head’ and what we ‘experience with our senses’ with what we ‘know about the Earth’? That requires a multidimensional, intuitive and inclusive approach. It is also worth making a distinction between what we can do personally; a loving, respectful, sustainable attitude and way of acting towards our living environment and the Earth, without negative impact, and what we are able to do collectively; not destabilising the self-regulating Earth system, with the most important example being climate change as a result of accelerated CO₂ emissions through the burning of fossil energy. The former requires a different personal attitude, a different mindset, while the latter requires a transformation of the current economic system from a belief in market forces to a belief in the Earth, in which it is not the individual but the collective interest that takes centre stage.

In a free, democratic society, the citizens and the companies are the ones who have to make the shift, persuaded and

inspired to that end by politicians. Companies must make their business operations more sustainable in the short term: a major but necessary assignment. Citizens have a dual-task. On the one hand, they must themselves want to be inhabitants of Earth without negative impact, while on the other hand, they must jointly determine and influence the course of politics. But how do you get those citizens to do that? How do we mobilise and activate that communal power? How do you become, in addition to a convinced inhabitant of Earth, part of the collective force that can stimulate the actual transition on the necessary scale: the Earth scale?

Earth Romance

The transition process must be faster and more ambitious if we don’t want to lose even more things of value. That requires decisiveness and courage from all parties, but

also willpower, imagination, new stories, creativity, the mobilisation of social energy, the stimulation of innovations and technological developments, making unexpected connections and the activation of concrete imitable and persuasive examples. These are all keys to opening the various doors to a life in harmony with nature and planet Earth. We will have to make use of all those options. The power of new stories and the effect of our imagination can help with that. However, simply changing our attitude and our behaviour is not sufficient. We need the collective power of all people, the global population, and the power of creativity and technology to accelerate the processes of change.

One thing we have in common with animals is that deep down, our motives are not rational but intuitive and emotional. Consciously activating our intuitive, emotional brain could strengthen the connection with each other and with all aspects of nature and the Earth. Perhaps we can develop a collective 'Earth Romance', with Gaia in the starring role. A new story about beauty, harmony and

equality; about the profound connection with nature – 'We are nature' – and the richness thereof. A story that touches and leads to change. It could be music, a show, a building, a painting, a book, a fairy tale or a comic strip, as long as it's compelling, powerful, seductive and convincing. Do you still remember that story about money? About that floppy piece of paper with which we can buy everything because we believe in the value thereof? Or that one about God, who could command good and evil, heaven and hell, and who gave our lives a sense of direction for centuries? How wonderful would it be to have an equally convincing story about the value and the beauty of the Earth, an Earth that points us in the direction of a meaningful and sustainable existence!

Female Power

As I previously stated, the success of the human species is primarily based on being able to cooperate in large groups. As a collective of eight billion cooperating people, we can be of inestimable value to the necessary transition process. The combined social energy as a revolutionary force; wouldn't be the first time in history. In that way, we could – with the proper training, increasingly connected and possessing unprecedented technological possibilities – jointly search for a solution to the problems we have caused ourselves. I have primarily placed my hope in the female half of the global population. Would the development of the world have gone differently under the leadership of women, who may be better at 'Earth thinking, more sensitive to what the Earth needs and dare to trust in the other more? My proposal: let us reduce male dominance in society and give women the leading role. Make women the main characters in the transition and the new stories.

The power of the imagination

The visual power of stories and art, in general, opens new worlds offering prospects, insights and perspectives. It confronts and offers solace. It arouses anger or curiosity. And that is what we need for the transition to have any chance of success – new, alluring and convincing prospects that make us aware of the necessity for the transformation in our way of thinking and the beauty of that step.

We can't emphasise enough that fiction can be more powerful than reality. However, how do we ensure that these stories manage to convince a broad audience? That they can touch the hearts of an awful lot of people? Which requirements does a good story have to fulfil? Let us unpack that for a moment. A good story – or a painting, a dance performance, a piece of music, poem, photo or building – surprises, imposes itself upon us and appeals to something we know or think we know. It broadens your outlook, pushes boundaries, makes you doubt, makes you uneasy or pacifies

you and invites reflection. But above all, a good story stirs the imagination. Why is the Bible the most widely circulated book in the world? Because the stories are appealing. The institution of the church has cleverly responded to this with rituals, hymns, gatherings and the use of symbols. We can learn a lot from that method, provided we are also aware of the downsides. New stories must be stories that reassure us in a playful way that we can reverse the negative effects of our treatment of the Earth into something positive. They must also be optimistic, empathetic, hopeful and challenging without being blind to the sizeable and far-reaching task ahead of us. A good story is something you want to pass on and spreads lightning-fast, especially with the current Internet. A good story expresses your desires, makes a lasting impression, touches the heart, moves and evokes emotion. A good story dispels the ‘mist’ that hangs around our heads and prevents contact with the Earth.

The storytellers

For us to learn to look at planet Earth with ‘new eyes’, artists and creative minds from all disciplines are much needed. They are specialists in telling new stories in a playful, challenging and enticing way and devising accompanying images and rituals. They understand the art of reading the underlying and often dormant spirit of the times and making it palpable. Allow all creative minds from all cultural disciplines – music, dance, theatre, poetry, literature, film, architecture, visual arts – together with scientists and pioneers from the practice to dare to dream and think ‘big’ and ‘even bigger’. Give them the room for ‘imagination’ and the ‘intuitive’ thinking to radically reassess our current ‘values’ and our ‘actions’. Allow them to develop new languages that touch our hearts and create new stories and images that help us realise that we are walking in the mist, that seductive illusions intoxicate us, and that we need to change radically. The message is not less, but more, not poorer, but richer.

Mental bridges

The message would gain enormous momentum if we could learn to think on the scale of the Earth and get to know its fascinating, complex laws better. We know a lot, but there's a lot more we don't know. For example, we cannot accurately grasp the hidden impact of our actions. That is why we need time and space bridges connecting our daily living environment and the big story about the complex Earth system. Therein lies a major challenge. But how do you tackle that? Possible examples such as the 'Gaia hypothesis' by James Lovelock, the 'Critical Zone' by Bruno Latour and the book *De verborgen impact* (The hidden impact) by Babette Porcelijn can help us realise what we don't see but which we are responsible for in part.

In addition, we need time bridges that connect the present day with deep time, which teach us to deal with different time scales and types of time: the fast human time and slow time of the Earth with its flow time, cyclical time and pulse

time. That teaches us to see the logic of the constantly-moving slow Earth processes from the perspective of deep time. That leads us, in short, to think without the use of scales and to put things into perspective. The Deep Time Walk app, or the Tegentijd app of Merlijn Twaalfhoven, which is based thereon, could assist. The Deep Time Walk is a walk of 4.6 kilometres, each metre being a million years. It is a physical experience of time, of the evolution of the Earth.

We also need a time bridge that helps put long-term thinking above short-term thinking and connects them; that encourages us 'to be a good ancestor', as Roman Krznaric describes. In addition to the time bridges, knowledge bridges are needed to connect the ideas of experts, philosophers, and scientists and make them accessible to ordinary citizens. The impressive film by David Attenborough, *A life on our planet*, is an ideal example of this. Increasing knowledge and arousing curiosity can help us, adolescents, along the path to adulthood—for example, a translation of the complex climate change models that anyone can understand. The three different bridges help liberate us

from the technocratic paradigm and demolish the artificial barrier between humans and nature. We are ungrounded, also literally; we wear shoes, cycle, drive, fly and live for the most part disconnected from the ground beneath us, especially in cities. We need to ground ourselves again and make contact with the Earth, both physically and mentally. These are big words. And it's easier said than done. The main challenge is to broaden our day-to-day focus from the 'here and now' to the 'there and later' embedded in history. It requires knowledge and courage to dare liberate yourself from the – often oh so comfortable – web in which we have managed to trap ourselves. However, we will get something more beautiful in return: a clean Earth, a life in harmony with nature and without a feeling of guilt. What a liberation that will be.

Afterword

We are on the eve of turbulent times. The foundations of democracy are under attack from all sides. The post-war world order is being challenged, and the climate and the Earth require a different approach from our society and our economic system. The time of adolescent behaviour has passed. It is high time to start behaving like adults. Planet Paradise nurtures a desire for a stable and clean future for all inhabitants of Earth, humans, plants and animals. Towards a world with understanding for each other, where connection, equality, diversity, richness, beauty and amazement occupy centre stage. A world in which the market-driven economy is only one of the aspects, instead of the most important goal. It is up to us, specifically the young generation, to create new stories, build new bridges and make connections. So the miraculous world of nature, the value of human and non-human relationships and the connection with our unique planet Earth, with Gaia, becomes visible and palpable. We need stories that show us that the

‘human web’ is part of nature. Because nature includes us too – farmer, urban dweller, Asian, European, American, manager, informal caregiver, minister, biologist, student, and artist – we are all connected with the Earth and the cosmos. Indigenous people have known that already for centuries. They look ahead to seven generations to be good ancestors. Let us learn from them and make their story our own in a new, appealing and modern language with inspiring and seductive new images. And it can be supplemented with our ever-growing current scientific knowledge, in the awareness that our present-day world is different but also precisely the same: one big miracle! A miracle that makes the cherishing thereof more than worthwhile. Count me in! What will you do?

Bruno Doedens - 02022

List of books consulted, sources of inspiration for new stories

Books by scientists, philosophers, writers, journalists and experts help you to determine your position in the transition process and contribute to a refreshing outlook on our present-day reality and also therefore the possible future.

For example. James Lovelock (1 and 2), Manuel Sintubin (3) and Peter Westbroek (4) taught me to understand complex Earth systems better. With their philosophical outlook, Bruno Latour (5 and 6), Timothy Morton (7), Clive Hamilton (8) and Stephen Hawking (9) were extremely helpful in teaching me look past my own boundaries. For a good overview of the Anthropocene, the human epoch, Yuval Noah Harari (10, 11 and 12), René ten Bos (13), Albert Faber (14), Jaap Tielbeke (15) and also Paul Kingsnorth (16) and David Attenborough (17) are of great importance. For the more concrete challenges and solution-oriented approaches, Michael Braungart & William McDonough (18), Gunter Pauli (19) and Babette Porcelijn (20) are very inspiring. If you would like to know more about all aspects of climate change, then read Bert Amesz (21) and Bart Verheggen (22). To better understand that there is still so much we don't yet know about nature, read Peter Wohlleben (23) and Stefano Mancuso (24). And for recognising the role of the story and the power of the imagination, Rutger Bregman (25), Floris Alkemade (26), Merlijn Twaalfhoven (27), Philipp Blom (28) and Roman Krznaric (29) are very much worth reading. In addition to the writers mentioned here, including the accompanying list of books I have read below, there are of course many more

books, films and sources of inspiration worth mentioning. I read all books in Dutch. Many of them are also available in English. Most of the books include an extensive list of helpful links to websites, articles and books. Reading sharpens your mind. Get inspired!

1 The Revenge of Gaia - James Lovelock

Why the Earth is fighting back – and how can still save humanity. Humankind has abused the Earth for centuries without thinking about the consequences. Now the world is becoming warmer and weather patterns are changing radically, we are noticing that the planet is starting to fight back. Gaia, the natural equilibrium system between the biosphere of the Earth and space in which the planet is moving, is just as important for humankind as oxygen. However, the system is beginning to crack at the seams.

2 Novacene: The Coming Age of Hyperintelligence - James Lovelock

James Lovelock is the person who thought up the Gaia theory. In this book about the Novacene, the successor to the Anthropocene according to the 101-year-old Lovelock, he argues that the power of artificial intelligence will create new life forms. They will be faster and will relate to us in the same that we currently relate to plants. Fortunately for humans, these hyperintelligent beings will be just as dependent on the health of the planet as we are.

3 De wetenschap van de aarde (The science of the Earth) - Manuel Sintubin

In this book, we discover how Planet Earth works. Two essential aspects are addressed. As self-regulating system that is trying to survive in an ever-changing cosmic environment, our planet is in a permanent state of global change. In addition, there is the aspect of time. The world around only came about after 4.5 billion years of turbulent Earth history.

4 De ontdekking van de aarde (The discovery of the Earth) - Peter Westbroek

Seeing planet Earth from space ushered in a new outlook on our Earth and a new science was born. A science that penetrates deeper into the story of our miraculous planet. 'Earth System Science' is a plea to see the Earth as a cohesive superorganism.

5 Down to Earth: Politics in the New Climatic Regime - Bruno Latour

A plea to put climate centre stage in geopolitics. It is directly connected with inequality and injustice. We must find a new communal orientation. A map is needed for that with the positions of the new political landscape.

6 The Parliament of Things - Bruno Latour

About Gaia and the representation of non-humans. In 1994, the French philosopher Latour launched the Parliament of Things, an idea that has had a great response worldwide. Latour connects politics, science and bureaucracy with each other in a new, non-hierarchical manner in order to be able to represent the interests of non-human beings and entities.

7 Dark Ecology - Timothy Morton

Morton combines philosophy, science, art and culture into an unsettling whole. He joins in the discussion, which is being held on an increasingly wide scale, about the Anthropocene, the epoch in which humankind has become a geological factor and is exerting a destructive influence on the climate and the condition of the Earth. At the same time, he opposes the simplistic argument that this concerns one-way traffic: humankind is, in turn, being equally pierced and processed, attracted and repelled by non-human actors, such as bacteria and molecules.

8 Defiant Earth - Clive Hamilton

About the fate of humans in the Anthropocene. Hamilton outlines the developments in thinking about the climate and the future of our planet. He takes a clear stance therein: humans have become a natural force. We must do something now. We are still unable to fathom the enormous impact that humans have had on the Earth. Hamilton offers a provocative, but hopeful perspective on the future of our planet, with or without humans as inhabitants.

9 Brief Answers to the Big Questions - Stephen Hawking

An explanation of the universe that is understandable for the general public. About the creation of cosmos, black holes, in short the laws of nature. How did everything begin? Will we survive on Earth? Is there intelligent life elsewhere in the universe? Will artificial intelligence become smarter than us? A personal perspective on the challenges we face as humanity and on the question of where we, as a planet, are heading next.

10 Sapiens - Yuval Noah Harari

A brief history of humankind. In Sapiens, Harari takes us on a fascinating journey through the history of humankind. Who are we? Where do we come from? And how have we become who we are now? In his infectious account, he introduces us to a puzzling phenomenon: humans.

11 Homo Deus - Yuval Noah Harari

God is dead, humans control the Earth. But what happens if it becomes possible to genetically engineer humans? If we are not only able to cure ourselves better, but also 'improve' ourselves? As Homo sapiens changes into Homo deus, what will our future look like then?

12 21 lessons for the 21st century - Yuval Noah Harari

What are the challenges of our times? Do the global problems we are facing require different political systems? How do we defend ourselves against fake news? What will be the new global force? In this book, Harari answers the 21 most urgent questions of our times.

13 Dwalen in het Antropoceen (Wandering in the Anthropocene) - René ten Bos

In this book, ten Bos brings together scientific and philosophical visions to offer some orientation points. His message is to get used to the Anthropocene: a new opaque ecological reality.

14 De gemaakte planeet. Leven in het Anthropocene (The fabricated planet: Life in the Anthropocene) - Albert Faber

We are living in the Anthropocene, the human epoch. The impact of humankind on the Earth is greater than ever before. In the book, Faber takes us to all kinds of places on the Earth and he explores what the Anthropocene entails and means for us. He doesn't support pessimistic doom-mongering, but looks for paths for renewed momentum.

15 Een beter milieu begint niet bij jezelf (A better environment does not start with you) - Jaap Tielbeke

With this book, Tielbeke bursts the myths that are dominating the current climate debate. We focus too much on personal behavioural change and technological innovation, while true change begins with the world of politics. If the situation is serious enough, we are prepared for and capable of radical change, as the coronavirus pandemic has proven. We must handle the ecological breakdown with the same urgency.

16 Confessions of a Recovering Environmentalist - Paul Kingsnorth

A radically different perspective on nature conservation. About the loss of untouched nature. About 'dark ecology', a vision that is opposed to the conviction that technology can save us. A plea for a renewed balance between human and non-human nature.

17 A life on our planet - David Attenborough

A powerful testimony about the impact of humankind on nature and a hopeful message for future generations. How did things get to this point? What are the consequences? And most important of all: what can we do to make nature wild again? We have one more opportunity to create the perfect home for ourselves and to restore the fantastic planet that we have inherited. We don't need anything else but the will to do it.

18 C2C - Michael Braungart & William McDonough

Current environmental thought urges us to 'reduce, reuse and recycle'. But that only leads to maintaining the 'cradle to grave' production model with enormous amounts of waste and pollution. We shouldn't produce less but more. That is possible. If we exclusively design intelligent products, made from materials that we can repeatedly return to biological and technological cycles.

19 Blue Economy - Gunter Pauli

By looking carefully at natural systems, we can arrive at a sustainable manner of production and consumption. Knowledge of the way in which organisms are formed and function can help us come up with solutions for the many challenges in the near future. Pauli gives hundreds of examples of innovative and sustainable production methods, which are drastically changing our manner of production and consumption.

20 The Hidden Impact - Babette Porcelijn

Porcelijn provides insight into our impact on the planet. That impact primarily takes place out of our view and is much greater than we think. It's only when you know where the biggest problems are, you can effectively increase sustainability. The Hidden Impact provides something to hold onto for people who want to turn the negative impact on the planet into something positive.

21 Aan de knoppen van het klimaat (At the controls of the climate) - Bert Amesz

A book about climate change that is understandable for everyone. All factors that affect the climate are discussed, both human and natural. Climate processes are transparently described and clearly illustrated. It includes answers to frequently asked questions.

22 Wat iedereen zou moeten weten over klimaatverandering (What everyone should know about climate change) - Bart Verheggen

Verheggen clarifies the multiplicity of information in his role as climate scientist. He explains what we know about climate change in a clear and understandable manner: how and why does the climate change and how do we know that actually? Which risks are associated with this and how can we limit those?

23 The Hidden Life of Trees - Peter Wohlleben

The story of a forester who approaches the trees in a totally different manner. Wohlleben sees trees as very intelligent beings and compares them to humans. Stories about the surprising processes of life, death and rebirth, observed in the forests. Wohlleben presents the science behind the hidden and unknown life of trees. And in this way we enter a completely new world.

24 Brilliant Green - Stefano Mancuso

Mancuso substantiates the intelligence of plants and demonstrates that plants have senses. He gives us an extremely accessible insight into the fascinating world of their abilities and intelligence, and researches how their strategies can be an example for the world of computers and ICT.

25 Humankind: A Hopeful History - Rutger Bregman

A substantiated plea to see humans as innately good. Approaching society in that way produces a different world. In this book, Bregman interweaves the most recent insights from psychology, economics, biology and archaeology. He takes us on a journey through history and provides new answers to old questions. Why was it our species that conquered the Earth? And are we inclined deep down towards evil or good?

26 De toekomst van Nederland (The future of the Netherlands) - Floris Alkemade

About the art of change. A fascinating and clear plea for the role of 'the imagination' and therefore the role of 'Arts and Science' in the current spatial challenges of the Netherlands.

27 Het is aan ons (It's up to us) - Merlijn Twaalfhoven

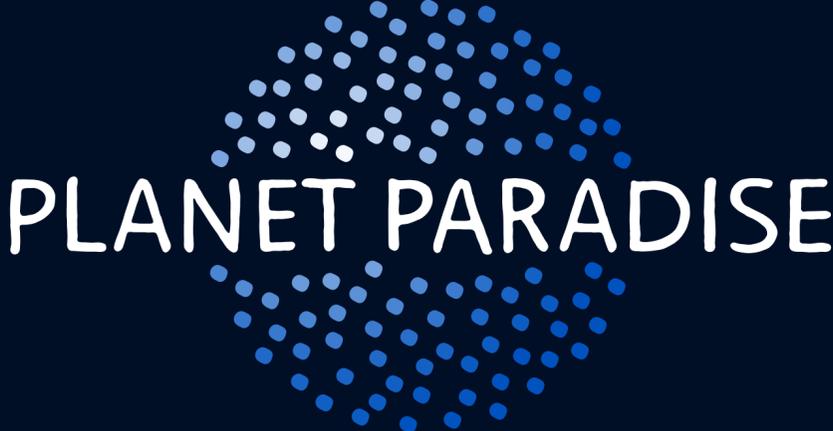
Why we need our inner artist to save the world. Anyone can contribute to solving small and large global problems. In his book, it becomes clear why beauty and amazement deserve a place in our day-to-day lives. He urges us to awake the creative, playful and investigative attitude that he calls the 'artist's mindset'. We all have it in us to create something of value – and if we join forces, we make the difference.

28 *Het Grote Wereldtoneel (The Great Global Theatre) - Philipp Blom*

About the power of the imagination in times of crisis. Blom gives a sharp diagnosis of our times. He paints an extremely clear picture of how humanity, particularly in the past hundred years, has milked the Earth and caused catastrophic damage to nature. He does not provide an answer for a solution. New imagination will be necessary to be able to deal with the changing Earth and find a new way of life. The battle for the future will be a battle for a new big story on the stage of the global theatre.

29 *De goede voorouder (The Good Ancestor - How to Think Long Term in a Short-Term World) - Roman Krznaric*

The major problems of our times can all be boiled down to one thing: we only think in the short term. That way of thinking colonises the future. You see it in the business sector, politics and personal life. In this way, greater inequality arises between population groups and existential threats increase. We are standing at the edge of the abyss. Nevertheless, there is hope. To become good ancestors, we must, among other things, radically transform our economic and political systems – an enormous challenge.



PLANET PARADISE