THE LOST CHANDELIER

I love big and old forests where you can get lost. Get really lost, without taking your phone out of your pocket, or studying a map, not looking for a way home, but wandering around with eyes open and enjoying being lost. This way you see more and perceive the forest with much more clarity.

The forest is a colossal mysterious and beautiful biosphere where all life forms are interconnected and speak to you in a thousand languages. Lie down in the moss, close your eyes and smell very slowly, as slowly as the grass grows, how all the scents gradually change and change and change, and feel yourself a part of the enthralling whole. Find in that harmony those simple and funny things that seemed so long lost.

TEARS BELONG TO NO ONE

The galleries that bark beetles leave underneath tree barks look pictographic. And they are indeed notes, messages about the beetles' having been there; the bark beetle family's life story and family tree are recorded in them.

A mother beetle gets under the tree bark through a passage made by an adult male beetle and creates a central incubation tunnel in the phloem. Along the sides of the tunnel she bores niches into which she lays her eggs. The wormlike larvae that hatch from the eggs start making side passageways. These are narrow at first, but the larvae grow as they keep eating and the tunnels become wider and wider. Somehow they sense the entire area of the tunnels and branch out according to their needs. If some of them die, they pull back again. Their passageways never intersect. When the larvae are quite big, they cocoon and pupate. In spring the pupa hatch into young insects and the circle of life starts anew.

It is also the circle of death – in nature everyone eats everyone and everyone feeds everyone, someone's death always means new life. In the case of a healthy tree, most bark beetles perish quite early on, getting stuck in the sap. It takes many generations before a tree becomes weak enough for the bark beetles to take over, and by then the beetle family itself has often become too weak. Everything is in balance. Sometimes bark beetles die, sometimes trees. We can shed a tear in memory of both.

SYNAPTIC SUGAR

Plants can see, although it's hard to imagine how they do it. They don't have eyes. But experiments have shown that they perceive their environments in great detail, just like we do with our eyes. They don't have nerves or synapses like animals. And yet, the same neurotransmitters have been found in plants which carry and amplify signals in our nervous system.

Perhaps they don't see optically like humans but their environmental perception stems from collaboration between all other senses. Plants have more senses than we do. They perceive the chemical consistency of their environment, the magnetic fields, atmospheric pressure and humidity and many other things for which we have to use measuring devices.

But the main food for plants is light. They transform light into sugars, which are ultimately the primary source of energy for all living nature.

KINGFISHER STORMS THROUGH A PHANTOM PLATFORM

These writings of mine here are not explanations of what the pictures mean but notes on what I think about as I look at them. Your thoughts can be completely different, life's more interesting that way. Multiplicity is an important characteristic of life.

There are many different worlds in nature that are on top of each other or interlaced. The world of birds, for example, is completely different from that of mosses. The living space of mosses is a very stationary gigantic, folded plane, they associate with minerals and light. From the light they make sugars, from the minerals they decompose phosphorus and other microelements. Eventually, when the mosses die, all life forms can partake in those substances. The world of birds, on the other hand, is a boundless air space where they can dash wherever they like. And yet the life of birds and mosses coincides. Birds can find quite a lot of edibles between mosses. Some even eat the moss itself or use it as nest material.

But the kingfisher is a real freeshooter who constantly flashes between two worlds, water and air.

GRAVITY

Scents are plants' Wi-Fi, their most important communication channel above ground. Plants are talented chemists. They can form widely varying substances and use them to exchange messages. Scented subs-

tances help to send airborne messages to other plants that there's a swarm of pests afoot and it's time to start producing pesticides. Or else send invitations to pollinators when it's flowering time and a great lot of nectar is available.

Scented messages reach far like birdsong and everyone can eavesdrop on them. This can be dangerous. And therefore, plants also send messages through their root systems. In the forest, plants, trees and mushrooms are connected by their root systems and mycelia. It's like a gigantic internet. The messages sent via underground channels are akin to private letters, not everyone can get at them.

CITY LIGHTS

The natural and the artificial are inextricably entwined nowadays, no living environments are untouched by human activity. The city amasses enormous cultural diversity, but it's in abject poverty in terms of biodiversity. In the forest, on the other hand, every stump is richer in species and denser with regard to inter-organism connections than a business district in Hong Kong.

To try to understand the forest, we must start from a completely different spatial logic, look straight ahead and over our shoulder, to the left as well as right, up and down, and most definitely right down among the blades of grass, under the moss and even into the earth (at least in our mind's eye), because in the forest very important things happen underground.

We must also think ourselves into different tempos, much faster and much slower than our own. A mosquito's life is fast and short, from their perspective we are moving in slow motion. The life of trees stretches over long centuries, to them we seem to zip around faster than ants seem to us. Many different proportions, harmonies and rhythms apply in the living world. And we are guided by the pictographic signposts of the bark beetles.

DRIZZLE SERVER

Everything that surrounds us in nature is just as alive as we are. Everything that lives also breathes, eats and procreates, feels pain and pleasure, perceives their surroundings, can adjust their behaviour accordingly and interact with other living beings.

Large plant formations, forests, can change climate and even summon rain. During drought, they start forming molecules that, as they become airborne, turn into nuclei around which atmospheric moisture condenses into rain drops.

PLANT PRIDE

Do plants have a consciousness, are they aware of their own existence? Certainly. They clearly don't confuse themselves with someone else, they act in their own best interests and communicate with others. Are they actually conscious? This depends on how we describe and define consciousness, what we mean by it.

The joke's in the fact that we cannot even define human consciousness, nor explain how it happens. We don't even know whether consciousness is a material or an immaterial phenomenon. And we can only answer the question of the consciousness of other life forms by relying on assumptions and prejudices. But it would be a nice thought experiment to imagine ourselves into a completely different consciousness that senses, feels and thinks entirely differently from us. And to think that there are loads of very different consciousnesses out there.

RAINFOREST SERVER

One of the idiosyncrasies of plant consciousness is that a plant probably doesn't sense on an individual level, but as a larger group, they seem to have a common consciousness. In the woods, all plants are interconnected either by mushroom mycelia or other communication channels. They push each other around for a living space and coordinate their activities for a more compatible association.

Through their interconnected root systems they exchange goods, support their own species and offspring. Collaboration has been observed between many species. For instance, mushrooms exchange sugars for the plants' nitrogen, phosphorus and rare minerals, because they cannot photosynthesise and make sugars themselves. They are like miners. For communication, they link their mycelia to plant roots and form huge networks that can stretch for hectares. The largest known living organism on our planet is the mushroom of almost ten square kilometres which lives in the Oregon mountains. It's the size of Lake Ülemiste in Tallinn.

SOLOMON'S SEAL

There's abundant diversity in nature, but different life forms can also be considered a gazillion manifestations of a common life force. As if it's one all-encompassing life that's constantly changing and taking new forms. Everyone's eating each other, everyone's kissing and feeding each other. There is no mourning in life as a whole, mourning occurs when we rip ourselves out of the whole and consider ourselves important. But there is twirling in pain and pleasure, in the infinite transformation of joie de vivre. It's intoxicating like the dance of Shiva in the bright moonlight.

PASSING THE FEAR

Fear is a natural response to real danger that forces us to concentrate so that we can make sensible decisions, to escape danger or to confront it.

Persistent fear, however, is a disease, it weakens and paralyses us. Through the ages, rulers have used fearmongering to strengthen their power. In the shape of media, fearmongering surrounds us from every angle, the consumption of fear has become an addiction. War, pandemic, economic crisis, wave of extinction and climate catastrophe are the sweetest clickbates. Paralysed, we eagerly await the next dose of fear, instead of letting the fear pass through us like a sieve and see if there are solutions to our problems.

ATLAS OF HEAVENS

The underground mushroom mycelia are like pipes through which plants trade goods, and like wires through which they communicate. Borrowing from the internet lexicon, this colossal and complex network has been dubbed the Wood Wide Web. In the woods, there are very many mushrooms and plants in overlapping connections with each other, kind of like nerve networks in our head. The connecting points where plant roots and mushroom mycelia have entwined can be compared to the synapses in our nervous system on a metaphorical level. But maybe not only metaphorically. If we stretch our imagination, it's quite easy to picture the consciousness of the forest.

The bigger part of a mushroom's life is hidden from our eyes, it's underground or inside trees. The cap we see is the mushroom's fruiting body, which it tips in the air for reproduction. The caps are also supplemental contact areas with other life forms. They're eaten by animals, birds and insects, and mushrooms influence them with their bodies, their components. Humans eat certain mushrooms specifically in order to change their consciousness. What do mushrooms know about that themselves?

Many fungi live in animals, like ants, and can influence their consciousness in great detail, altering the animal's behaviour to benefit fungal reproduction. Fungi live in humans, too, they burrow under our nails and skin, form colonies and civilisations. We don't know much about their influence on us. We usually only take notice when we're dealing with an out-of-control fungal infection. The influence may be a lot more indirect and manifest through other life forms inhabiting us, like making life hard for some fatal species of bacteria.

There is no place on earth where there are no mushrooms, everything is intertwined with them and in close mutual relationships. That is why the mushroom has become so iconic, reappearing as a motif from the Stone Age cave paintings to shaman drums, to the 19th century stem stitch embroidery kitchen towels. The mycobiota are like a map of the living world, a microcosmic model of the world.

DROWNED LAKES

When the climate warms, glaciers and icebergs melt, the water levels rise. Of course, this endangers the human civilisation and our accustomed lifestyle. Should we be scared? Perhaps we should do something instead? Since our lifestyle and habits must change anyway, maybe we should change them before we are forced to?

Change our habits, lie down in the moss, close your eyes and smell very slowly, as slowly as the grass grows, how all the scents gradually change and change and change, and feel yourself a part of the enthralling whole. Find in that harmony those simple and funny things that seemed so long lost.

Everything takes time, the grass grows and the forests regenerate slowly, but in time we can learn to behave politely and be grateful. We'll learn to feel, think and act so that there's room for other life forms next to us, without whom we can't manage. We will create new stories and songs that can be sung together with everything that lives, and they will guide us down better roads than the ones already well-trodden.

PEETER LAURITS • SOMETHING'S RELATED TO EVERYTHING • ESTONIAN MUSEUM OF NATURAL HISTORY

This is an exhibition that offers new ways of seeing nature. In nature, the invisible and barely perceptible processes are much more important than the ones we can see with our eyes or touch with our hands. We are not very likely to ever cast a glance underground where life's abuzz. We only notice a small fraction of how in the living world everything is related to everything. The consciousness of other life forms, their mutual interactions and influences are out of the reach of our senses. Beyond that, we have our knowledge and imagination. What we can't see, we can imagine.

Peeter Laurits (b. 1962) has studied at the universities of Tartu and Leningrad, the School of Humanities at Tallinn University and the International Centre of Photography in New York. Laurits' main means of expression are photography and digital manipulations. He has enriched photographical modes of expression and expanded the role of photography in the Estonian cultural space. Today, his art centres around posthumanist ethics. Laurits has had solo exhibitions in London, Berlin, Moscow and Chiang Mai, his works have been acquired by museums and private collections, and monumental works by him have been commissioned for public spaces. In 2017, he was invited to take on the position of visiting professor of the liberal arts at the University of Tartu and since 2021 he is curating the international science and art symposium Biotoopia.

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ldid

scholtzi, bats, bush-crickets, rain, wind)