

DIGITALISATION

Culturala

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Editorial Note

Dear friend – hello!

Welcome to culturala's digitalisation issue, we're glad to have you here with us.

Digitalisation is a phenomenon that we're all too familiar with, but it is rare that we actually speak about it. So, what is really digitalisation all about? Is it when we perceive things to be from the digital realm? Is it our current obsessions with phones, or the fear connected to anxieties and excitement over algorithms?

In this second issue of culturala, we deep-dive into the topic through the lens of thirteen writers, artists, art historians and poets. The issue is combined with a [public program](#) where you can find all our on- and offline events and publications. This issue is continuously expanding, and there's an upcoming audio version, too! You can access this as well as a continuously updated library and keyword-based access through the web version of the issue.

The web version of the *digitalisation* issue is available through culturala-digitalisation.webflow.io with the password digitalisation-of-the-21st-century.

Hope you enjoy!

With love,
culturala

THE PLANET IN DIGITAL TIME

a conversation between Dandara Hahn,

Daniel Hengst, and

Maria Kruglyak

1. By Way Of Introduction



Dandara Hahn, Untitled (2019). Photo: Ana Pigosso.

This conversation took many forms, from attempted and sometimes successful Zoom meetings to WhatsApp voice notes, email correspondences and text messages. It's been edited into its final form by Maria, who facilitated the discussion.

Maria

Dear Dandara, dear Daniel. I'm very pleased to introduce you both to each

other as you both work with vegetation and nature as well as in the realm of digital art. Dandara, perhaps you could start by sharing some of your work, and tell us a little bit about your process of working with nature and when you do – and don't – translate it into the digital.

Dandara

Hey Maria, hey Daniel. Good morning from Brazil. I'm a visual artist and designer from Florianopolis, an island in the south of Brazil in the state of Santa Catarina. I think that a lot of my way of thinking was shaped by the place I grew up in as I had the opportunity to observe abundant nature as a child. I grew up with my mother, my grandfather and grandmother, who were fishermen so everything that I ate was what the land and the sea provided. I was totally surrounded by nature: incredibly beautiful beaches and backyards.



Dandara Hahn, Monstro (2020).

I studied graphic design and it was this field that made me learn about the more theoretical aspect of all of this. Around this time I read [the Brazilian Czech-born philosopher, writer and journalist] Vilém Flusser, who was my introduction to thinking differently about the world and about materiality as a living thing. I find myself right now increasingly trying to make these two

areas in my life – design and art, and the feeling and the theory – come closer and closer.

There are a lot of things I believe as a human being that make me keep researching and studying and developing my artistic practice. I believe that we are living in a time when life that we used to consider normal has been challenged. I believe that the political and philosophical distancing from the natural world is no longer possible despite capitalism making us think that it is. We're in a moment of reconfiguration. We're not isolated, we exist in symbiotic ecosystems among computers and bacteria and many things that we will never understand at all.



Dandara Hahn, Flora II (2020).

Daniel

Hi Dandara, thank you very much for this great introduction. I think that how you think and work, where you're coming from and the aim of your processes concern questions and topics I like to think and read about.

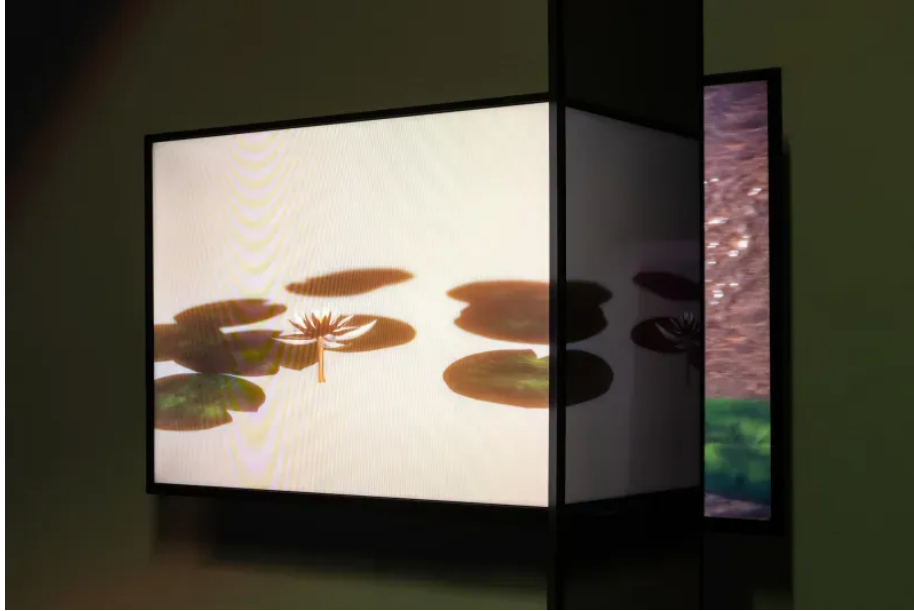
My background is more on the technological side and, although I'm not a designer, I also have two subjects that I unite in my current practice. On one hand, there are these digital technologies, programming/coding, 3D-modelling, game-creation or creation of game-like environments and simulations that I learned in my studies as a video technologist. And on the

other hand, there's a question of representation that comes from my 15 years working in theatre and that I'm really interested in. I think one of the core questions at least in German theatre is representation: who's represented in what ways and who's representing whom.



Daniel Hengst, Blooming Love (2020, the media art gallery RIXC in Riga, Latvia): exhibition view.

Lately, I've been working a lot with peatland plants. Peatlands are really special, because they bind a huge amount of CO₂ as dead growth is not decomposing. There used to be peatlands all over central Europe, but starting in the middle of the eighteenth century, they were drained as part of large-scale projects building channels to and from rivers. We could restore them if we'd only be keen to rewater these areas. I find them fascinating, especially a particular type of peat which is a raised bog that just grows and grows, getting bigger and bigger over centuries. The area basically becomes encapsulated and no groundwater can flow in and out although the peat is really wet. Almost no bacteria or air can reach the plants after they die and so the CO₂ that's stored inside plants through photosynthesis gets trapped inside the peatland. When you drain them, the CO₂ comes out. In some parts of Germany, the biggest emitter of CO₂ comes from draining peatlands, which is really tragic and wasteful.



Daniel Hengst, Nastien und Tropismen (2022): exhibition view.

I started my work with peatlands during a residency a couple of years ago in Latvia, in the Baltics in northern Europe, where they still have a lot of intact peatlands storing a lot of CO₂. Here I began to investigate how to create the desire for this special type of nature and also, in a way, how to say goodbye to our involvement with these plants and this nature in order to leave nature alone and regenerate itself.

2. Uncanny Valley



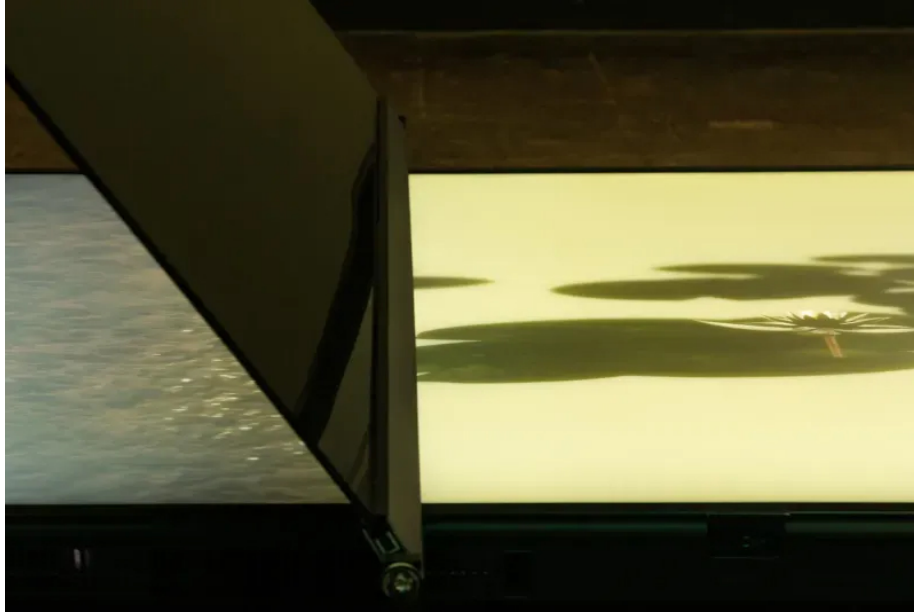
Daniel Hengst, Nastien und Tropismen: Sphagnum magellanicum (2022)

Maria

In your work, Daniel, you're using a digital practice to portray, showcase and research peatland plants. What did the digitalisation of these bring about? What did it mean for you?

Daniel

Something I find interesting with digitalisation is [the uncanny valley](#). It's a concept that comes from the robot scientist Masahiro Mori who tackled the question of what makes us feel empathy. In the 1970s, Mori was concerned with puppets and masks from Noh theatre, showing that the more human a puppet looks, the more affinity we feel with it. When a puppet approaches but fails to look lifelike or human, we experience something in between empathy and revulsion – that's when you're in the midst of the uncanny valley.



Daniel Hengst, Nastien und Tropismen: Sphagnum magellanicum (2022)

For example, if we think of a corpse, it looks like a human but it isn't alive. A human corpse gives us a feeling of revulsion and empathy at once, as we see ourselves in it being human. It's in this in-between of revulsion and empathy, or as Mori called it, the uncanny valley. In my work, I ask myself: can I put the plants into this uncanny valley? If I make them realistic albeit purely digital, they may enter the uncanny valley, a space where our empathy is interrupted and where we can therefore renegotiate our relation to these plants.



Daniel Hengst, plant rendition for Blooming Love (2020).



Dandara Hahn, Sala (2018).

Maria

Dandara, what are your thoughts on creating the uncanny? I know you've been working with that idea, too, especially in your most recent work.

Dandara

Yes. I've been working on a book with the working title *Fon*. It's photos of the landscape here in the jungle of Sao Paulo and in Céara, in northeastern Brazil, where I spent a lot of the pandemic. Céara is basically the Mars of Brazil. The landscape is of red rocks and red soil, and then you've got all of these old antennas scattered everywhere. It's like silver with orange, and you're just wondering: what's this old object doing here? It's like

everything that's invisible passes through there, through these antennas, these veins of information.

So I was taking pictures of them in wider Céara and specifically in Quixada, and now I'm going back to take more photos of the satellites and the antennas. I'm combining this with stories that they have about aliens – because a lot of those stories come from there. The most reported alien sightings in Brazil are from Quicadal. I'm very excited to make a book with the stories and the photographs both of Céara and of larger São Paulo, where I'm living now.

Maria

It's curious how although this issue is about digitalisation, most of the artists featured here work with the uncanny. Sasha sees this space between the digital and the analogue as where the uncanniness can be created, for example. And then both of you also interact with this question of uncanniness, and I wonder if it's not to do with how **the digital world actually feels quite eerie?**

Dandara

[Yes, like it's unhuman but human-made.](#) I think of these alien sightings and the antennas as uncanny, too. The antennas are transmitting information, they're like a vein, but then they're made out of this material that's a dead thing – iron. So we think that it's an old, dead antenna. But it's not, it's working every time, so many things are passing through it, even things we can't imagine. It's really interesting, because it's a place that's so... There are only a few people in Céara and anything that reaches them comes from this energy and through the antenna, like a living being. All of the houses have a huge antenna in the garden, and in the mountains, too, because that's how people access TV.



Dandara Hahn, research photo for Fon (forthcoming).

Maria

Why are there so many stories of the aliens from there?

Dandara

[It's because of the materiality of the place](#), because of the nature, the humans and so on. In the big cities, there's a different kind of connection because we don't have the same type of soil. But there, we have huge, huge places of sand and the *falésias*. You just need to look at the landscape, let me show you.



Dandara Hahn, research photo for Fon (forthcoming) of the falésias.

Maria

The first project we were meant to feature of yours was the *Cogumelos Digitais*. It's an environmental sculptural work that was both in the physical world and in the digital world, and then it would change, right? It was also uncanny, actually, but closer to this pre-digital world of radio, electricity and transmission.

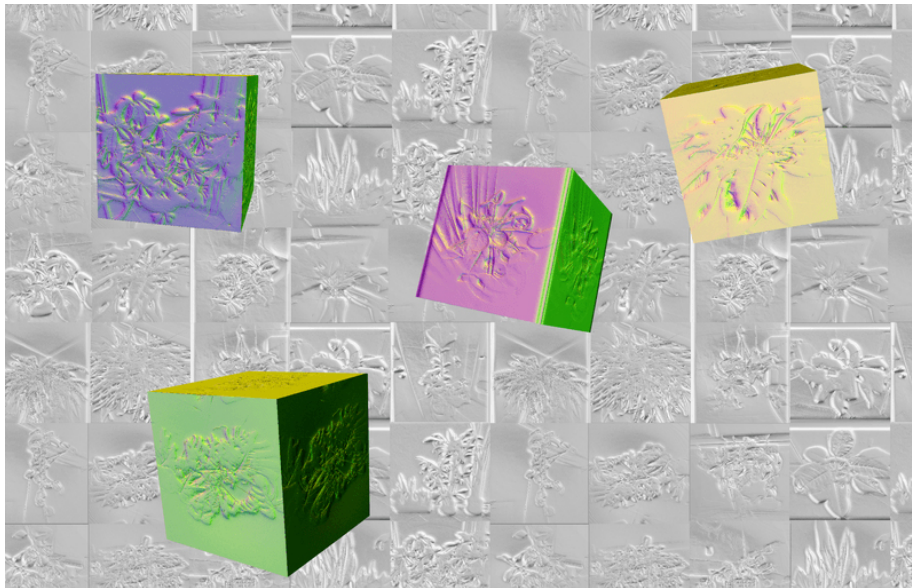
Dandara

Yes, and actually it was an antenna.



Dandara Hahn, Parede Cogumelo (2020).

3. Natural Or Human-Made



Dandara Hahn, Cogumelos Digitales (2021, prototype).

Maria

So if we think of the parallel that exists between both of your works, you both tackle questions concerning abnormal nature and the distinction between what is manmade and what is natural. It feels like the digitalisation aspect is able to highlight or illustrate that.

Dandara

Yes. [For me it's all about being human, existing on earth, touching things, and making things alive by touching them.](#) Like we have those magic hands that can make things come to life, even the nonhuman.

Maria

And then our hands sometimes do good and sometimes do bad.



Dandara Hahn, Eco (2021).

Dandara

Yes, I think 99% are bad, to be honest. But you know, Vilém Flusser speaks about us touching things and about bringing them to life. The way I see it is based on his words, like all of these electronic devices are portals of some form and we don't really know what they are. Sometimes it's a little bit weird, because we have so many portals in our homes – phones, TVs, WiFi routers – everyone has some of them at home. And these things are just totally waving and talking and everyone's like OK let's put this in my home.

Maria

Daniel, let's turn a little bit to your work now. Your works create these man-made versions of that which is natural, living. How do you create these digitised versions of peatland plants, and what do they stand for when you exhibit them?

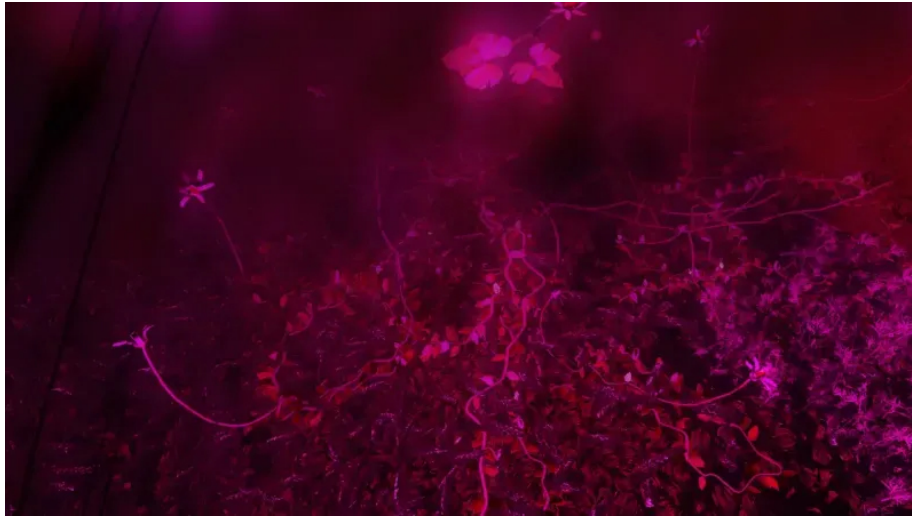
Daniel

Everything I do in my work is rendered in real time, with algorithms that creating natural environments as you see them. The plants are premodelled but they're placed in the virtual landscape at the very moment that the viewer is travelling through it so, you could say, the plants are shaped by you seeing them. They have different sizes, rotations, perspectives and

speed of movement – like an ensemble of plants being together in different ways.

Maria

Just like you do in *Blooming Love*, right? Where the visitor is going through this virtual reality shaped by plants and vegetation.



Daniel Hengst, screenshot from Blooming Love (2020).

Daniel

Exactly. *Blooming Love* and *Nastien & Tropismen* are both simulations, rendered in real time while the audience is watching. Most of the time you create environments in that way because you want your audience to interact – to become a co-creator of the experience. I inverted the idea of interactivity in both of my works so that the plants interact with you instead. In that way, I consciously reduce the human visitor to their mere gaze. In these works, you are moved around by the plants – instead of you moving the plants. I play with this in different ways. In my recent exhibition at HAUNT in Berlin, I worked with three monitors split with a black glass screens, and the visuals move between the different monitors, so if you want to continue watching the visuals, you basically have to move around the exhibition landscape. You are being moved by the plants, they are moving you through their virtual existence. Also if you want to see the part of the monitor that is covered by the black screens you have to move around them. There you find a different or second form of existence of the

plants.

Maria

So when you move behind the screen, you see another rendition, entering another way of seeing. What made you use this way of working? It's quite unusual to see, often we're unable to go beyond the idea of ourselves as the centre of creation.



Daniel Hengst, Nastien und Tropismen (2022): exhibition view.

Daniel

Most of the time I'm very embarrassed when I see what interactive digital art is teaching people – it's teaching us that we're god-like, that the virtual or real worlds represented in art exist and move at our command. Here, I try to emit the very opposite: it's the plants, not us that is creating movement. Plants are stable, stationary living beings but that doesn't say anything about their relation or hierarchical relation to us. Only through their existence and 'service' of cleaning the air are we able to live and move.

Meeting with scientists and biologists, it became more and more clear to me at least in this period of life, working and thinking, that we have to leave nature alone – at least peatlands. We need to stop using them for harvesting peat or stop drying them out. Looking at the little amount of 'protected'

nature on the world's surface and the part of nature that isn't threatened and governed by human forces, we need to make space and leave nature alone more often than we do. Not even 20-30% of the world's nature is non-human. [I think we have to congregate ourselves in the cities or in bigger compounds of human living where humans aren't interfering or changing these growing areas.](#) I think we need to find a way to create architecture that allows us to live stacked and packed, with localised infrastructure.

You can think about this as a small or big task. Looking at the smaller task and once again at the peatlands, it's interesting that they can restore themselves really well if you just leave them. In Latvia, I discovered from the scientist Agnes Priede that when the dried-out peatlands regenerated alone, they recovered sometimes better than when people were actively working on restoring them.

Maria

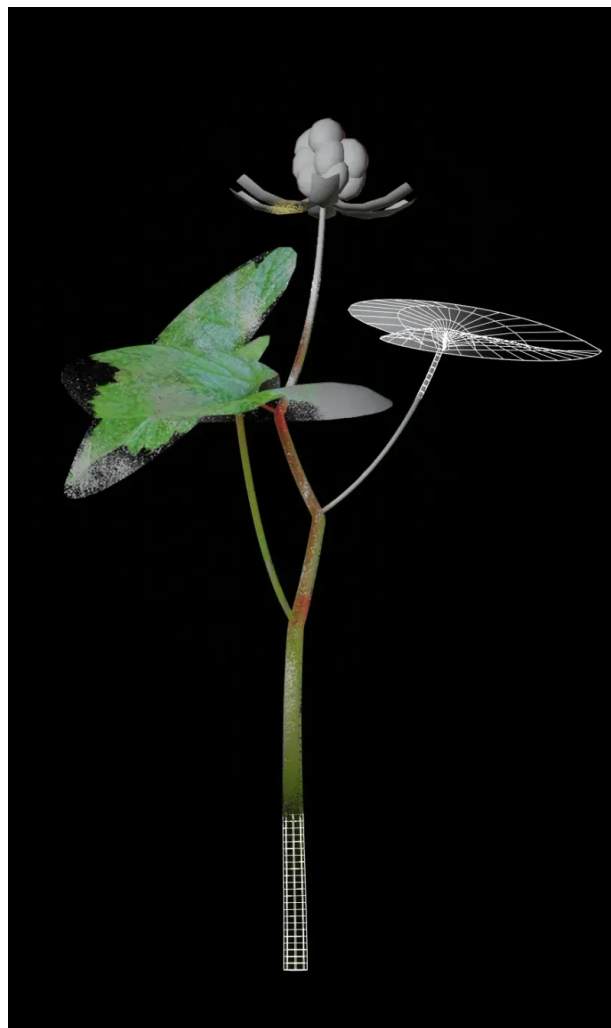
It reminds me of Yona Friedman's *Spatial City* project, where he was experimenting with ways that humans can build upwards rather than horizontally, creating this very compact way of human infrastructure. We've recently reached 9 billion people on the planet, and the question of how we collectively interact with the world around us is once again coming to the forefront of theoretical and philosophical debate.

We also have an epidemic of mental unhealth which many scientists believe is connected to the fact that so many of us live so far away from nature. We're surrounded by technology and human-built structures, and we lock ourselves up in various boxes of metal, cement and glass. Nature has an immense healing power for us as humans, and I think we're only beginning to understand how much we need it for our wellbeing.

Daniel

I'm very interested in this idea of balancing nature in different ways, or balancing this dichotomy between culture and nature. It depends on how you define nature actually, but I'm interested in researching or inventing some kind of virtual environment where you can experience nature as something different, perhaps in different representations.

My work poses these questions from a radical, digital position, speculating on what it would be like if we would do it this way, if we find other ways to bring – or make – nature into our lives? It's like if you have a table with a texture of a tree, a *simulacrum* of a tree, can that remind us of nature and quench this thirst for nature that we have so that we can leave it alone? Suppose you build a chair that looks like a branch. The virtual world doesn't look to me like this, it looks very square and not very nature-oriented. My work also asks what the digital environment would look like if it had the qualities of a simulacrum of nature.



Daniel Hengst, plant rendition for Blooming Love (2020).

Dandara

I don't really agree with that. I'm more of the opinion of living together and respecting nature. Living as nature. Thinking about us as beings of nature. Building houses that don't destroy nature so much. Thinking about ways of planting our own food. Respecting the cycle of the things that we are eating. Eating locally. Restoring what's been destroyed already. I don't know. It's impossible not to "destroy" nature but being and knowing that we are a part of it and maybe knowing that we are all one, not only on earth but the entire universe, respecting it, trusting it.



Dandara Hahn, research photo for Fon (forthcoming).

Daniel

I think it all comes down to relationships: how do we form a different relationship with nature? In the last three years, I've worked a lot with digital plants, digital trees and digital vegetation; with environments simulating nature comparable to how the digital sphere is simulating a social sphere. Maybe we're already at a point where social media is not only simulating this but where it is actually a social sphere, I'm not sure. Again, what we're often missing in art, culture and economics, is that plants are living creatures. It's always represented only as a means of production,

a means of understanding or a means of getting to know the world. I think this is something we can change in our understanding: by giving space to plants in our digital environments (like avatars representing the real life plants) we may be able to shift our perspective and create a reminder: remember this plant, remember this biome – this is why you are stopping here and not doing things like exploiting more land and so on and so on. As a reminder for the need of a kind of minimalism – that’s something that I’m interested in.

Dandara

It’s complicated. It’s a complicated question. But... I think that maybe it’s already happening. We’re already living together. We can’t live alone, we need the support of each other. I think that everyone on earth already lives among electronic things and there’s no escape anymore, there’s no going back. In a way, I feel anxious because there’s no escape. But also trying to make it a good thing. And I think that in sort of a way all of those things come from nature too. All of these materials that are around us have their own materialistic existence, so maybe if we understand how we can create and make them by not harming the environment, by researching materials that are more sustainable. And we’re already doing this, but we are starting this conversation – as humans.

Daniel Hengst is an artist based in Essen and Berlin, Germany. He works in video, sound and VR installation, specifically focusing on the potential of digital technologies that take the non-human into account. Since 2019 his focus lies on peatlands and human plant blindness, creating virtual environments of digital vegetation and representation of plant life. Examples include his recent exhibitions *Nastien & Tropismen* (2022) featuring a multimedia art installation and *Blooming Love* (2020) at RIXC in Riga, Latvia. You can find more of his work on danielhengst.de, on his vimeo channel [jithorse](https://vimeo.com/jithorse) and on his instagram [@danielhengst_jitterhorse](https://www.instagram.com/danielhengst_jitterhorse).

Dandara Hahn is a designer, artist, mother and long-term collaborator of culturala. Based in São Paulo, Graduated in Design and Communication, at ESPM-SP, and Post-Graduated in Graphic Design and the City, at Escola da Cidade. Her work is characterised by the exploration of intersections between art, design, creative practices, investigating notions of form and function, establishing relationships between creative practices, digital and natural/analogue media.

Dandara's work discusses the relationship with nature and its contrasts with artificial materials, acting on the boundaries between animate and inanimate beings and issues related to her existence as being a woman in the global south. She believes in the ability of images and objects to tell stories and transform culture. It is heavily inspired by science fiction, ideas taken from concepts of technologies applied to biological life forms and organisms that functioned as natural computers. From

installations, sculptures, objects, self-publishing, paintings, she has also been working for a decade on projects in various fields of graphic design, such as visual systems, editorial design and typography. You can follow her work via her instagram [@dandarahahn](#).

Maria Kruglyak is the founder and editor of culturala. She also works as an art researcher and writer, focusing on themes of contemporary art, art theoretical language, ecology and marginalisation. You can keep in touch with what she's doing through her instagram, [@m.kruglyak](#), or get in touch with her directly at maria@culturala.org.

CREDITS

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