

MA MODUL 01

Kim Kuhl



DOCUMENTATION MA MODUL 01
By Kim Kuhl

UdK Berlin, Winter 2021/2022

Universität der Künste Berlin
Institut für Produkt-und Prozessgestaltung (IPP)
Strasse des 17. Juni 118, 10623 Berlin

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This documentation shows a rough overview of my first master semester.

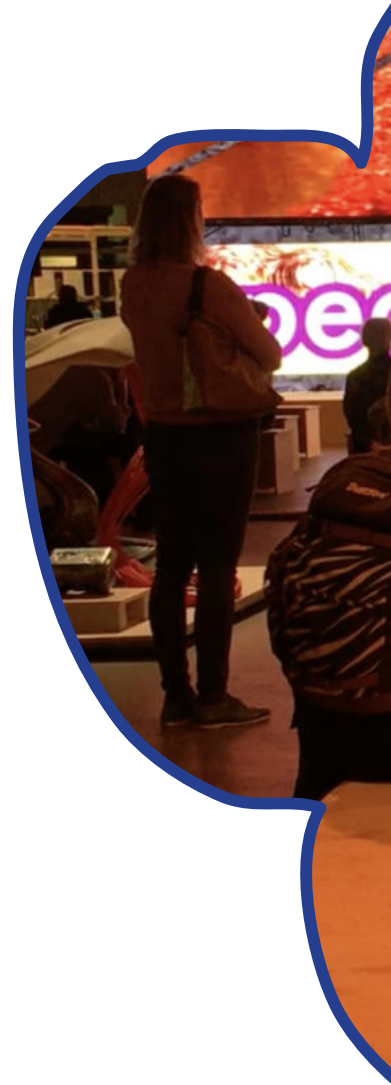


Every text underlaid with the red flower describes impulses, insights, inspirations, hypotheses and questions, I gained, that have contributed to my master's project approach with the provisional title 'Transfloralismus'.

Excursions

Dutch Design Week 21

BASF

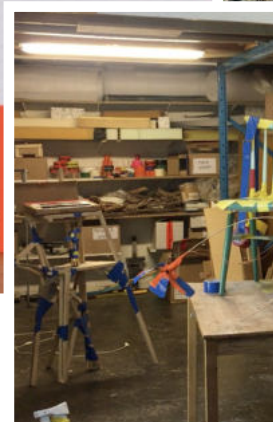




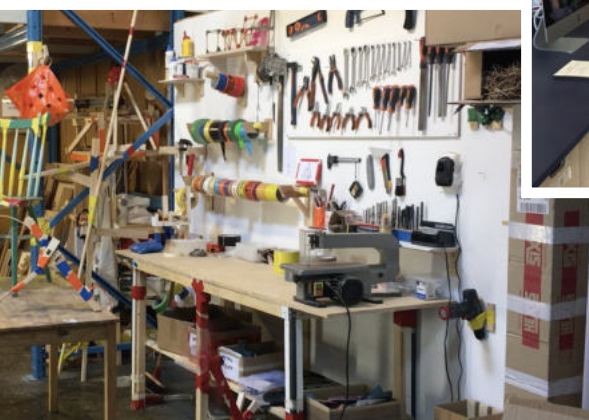
Excursions: Dutch Design Week 2021

At the beginning of the semester, we went to Dutch Design Week in Eindhoven together as a Master's group. Over the course of 5 days, we had a timetable full of meet and greets, numerous studios talks, saw the Design Academy exhibition, watched panel talks, made contacts and, above all, gather inspiration and input for the upcoming Master's semester.

- A: Bike Ride to Secti-C
- B+C: Panel Talks at Design Academy Eindhoven
- D: Touching Material
- E-F: Studio Visits
- G: Video Clip by Ineke Hans of her Chair REX
- I: Fungi Tower



Dutch Design Week 2021



Excursions: Dutch Design Week 2021

J: Project NESSI

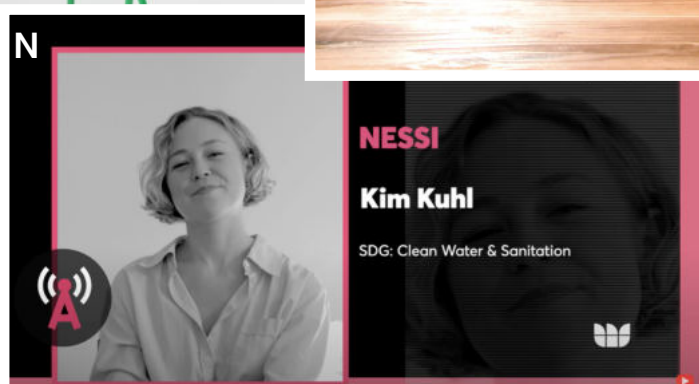
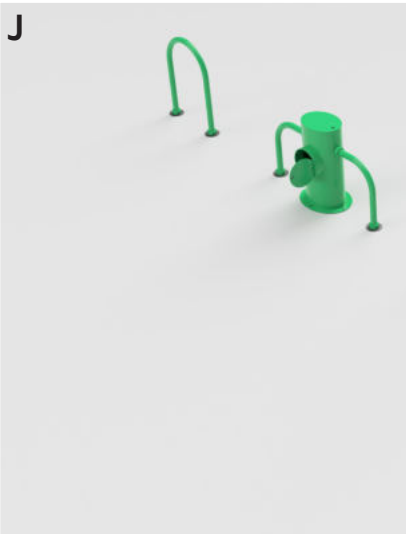
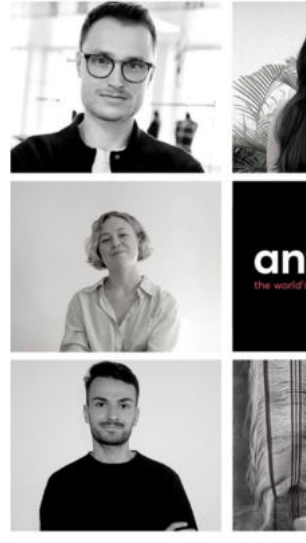
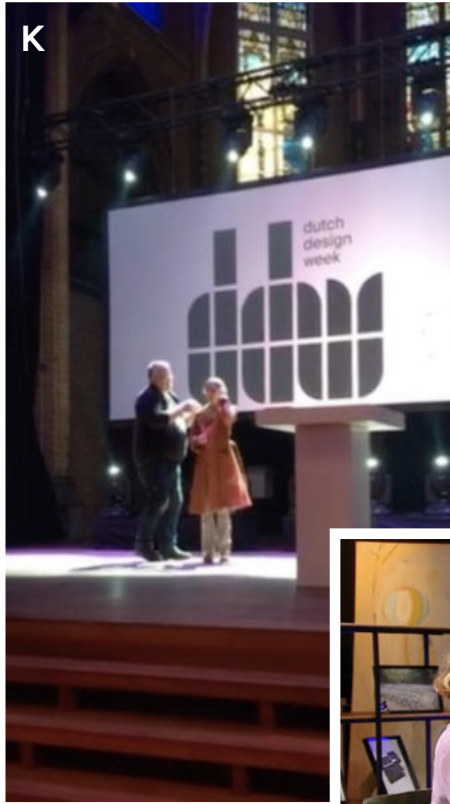
K: Preperation for the

Ambassodor's Dinner

L: Selected graduates

M: Interview at Dutch
Design TV

N: Shot of the project
video for Design
Indaba



Antenna 2021



During the Dutch Design Week 2021, I got invited to be part of the Antenna program with my project NESSI - Saving Urban Greens.

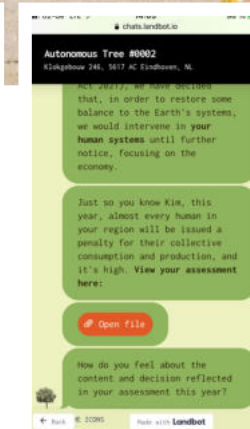
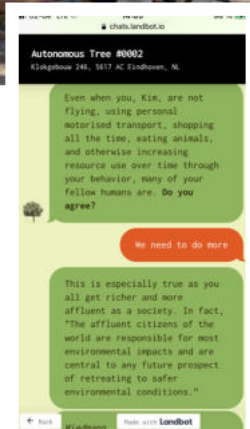
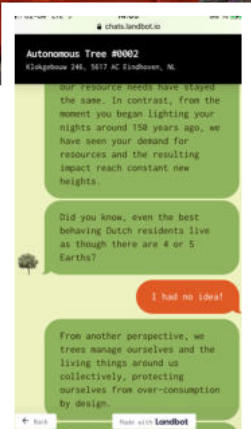
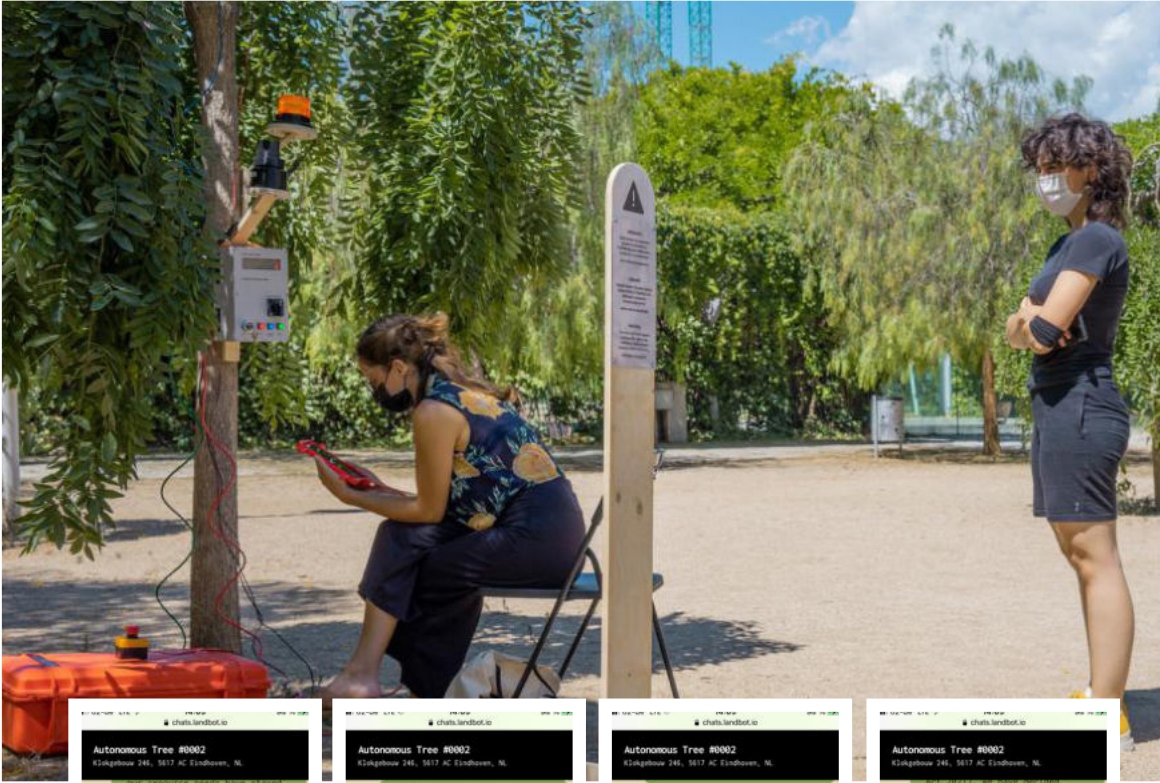
Every year, Antenna presents young students or recent graduates (past 2 years), under 35 years of age, who are creating design work that address one or more of the 17 Sustainable Development Goals as an overall aspect.

Selected candidates are invited to Holland for a matchmaking and networking program and supported in short talks to targeted audiences. This year 8 students and their projects were selected from international design schools.



I am still excited about my week at Antenna. A diverse international group of graduates, that I can now call friends, represented with their projects a wide range in design. The Antenna team facilitated private studio visits and dinners to introduce us to numerous exhibiting designers, people from the Dutch Design Foundation and from Design Indaba. My highlights were the presentation at the Ambassadors Dinner and the Dutch Design TV interview. By being invited to Antenna, my pool of contacts has grown and my insight into the design world has been further formed.

Excursions: Dutch Design Week 2021





Autonomous Tree by Krzysztof Wroński

Autonomous Tree is an art installation in which a tree is transformed to a non-human government agent critically assessing human behaviour. A tree, together with a human assistant, represents an ecological network that exists to protect and advocate for the best interest of non-human living beings. Humans engage in the dialogue using an arboreal chat-bot.

The installation draws attention to the tree's hypothetical power and promotes people to reflect on the ecological world's needs and challenges as well as their personal relationship with non-humans.

what can we learn from nature's
hypothetical verdict?

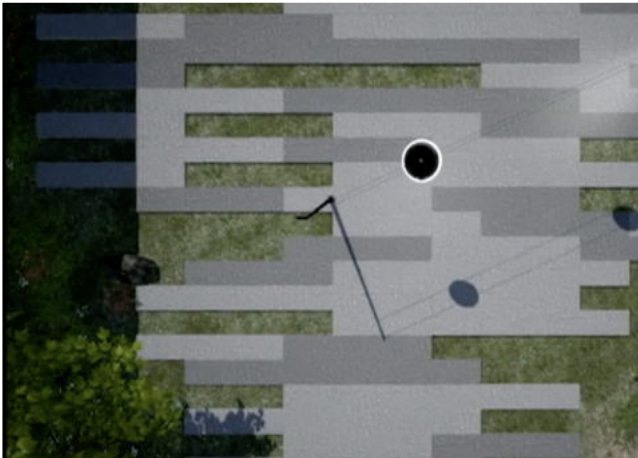
what if nature speaks up to humans?
how can we create experiences that
communicate us the nature's needs?

The focus on the non-human as a human's
duty in the anthropocene.

-> Decentralizing humans

-> Integrating non-human into policy

Excursions: Dutch Design Week 2021



- Object's behavior' inspired by nature
- Object mixing up and interacting with nature
- Objects working together with nature to make an impact



Sunseeker by Vantot

A solar powered sustainable and interactive (street) light-installation.

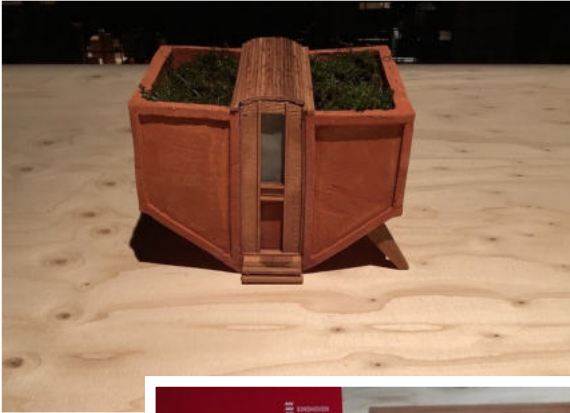
Dynamics by day:

The smart modules are equipped with light sensors and can move like tightrope walkers along the light chain with the position of the sun, looking for the sunniest spot producing as much energy as possible, enough to also be able to light up the night.

A guide at night:

At night SUNSEEKER can also move along and interact with the walking people in the park by changing light intensity and colour.

Excursions: Dutch Design Week 2021



The Unselfish Cabins Fé Ramakers

A series of cabins form a sustainable and symbiotic architectural system with minimal space consumption.

Tiny houses that densify the city in a symbiotic way. Each cabin explores how architecture can serve the city's ecosystem.



Inspired by the approach of unselfish objects:

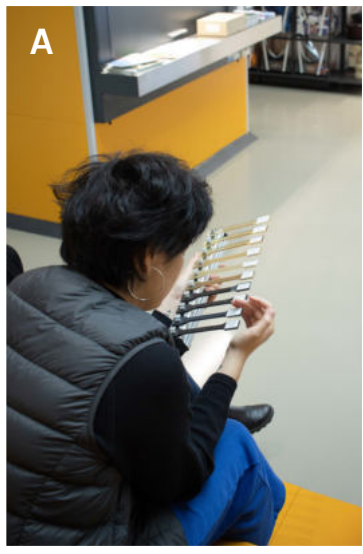
Can we create unselfish or even 'caring objects' that integrate into cities' ecosystems and care for our urban nature?

- > Decentralize the human
- > Focus on the non-human

Excursions: BASF Ludwigshafen

From 12 till 14 October we visited BASF in Ludwigshafen as kick-off for the cooperation project ONE MATERIAL, ONE PRODUCT.

At the BASF Creation Centre, we were introduced to three types of plastic: Ultramid, In addition we were shown the Technikum by BASF experts. The last day, we presented Material - One Product.





C

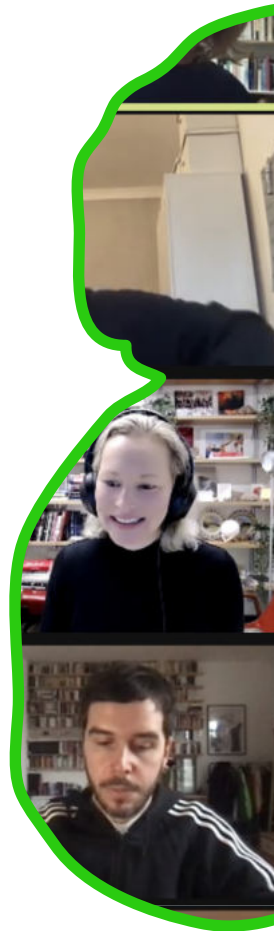
A: Jin with Ultrason samples
B: MA Group discussing at the BASF Creation Center
C: View of the BASF production site
D: Rooftop BASF Creation Center

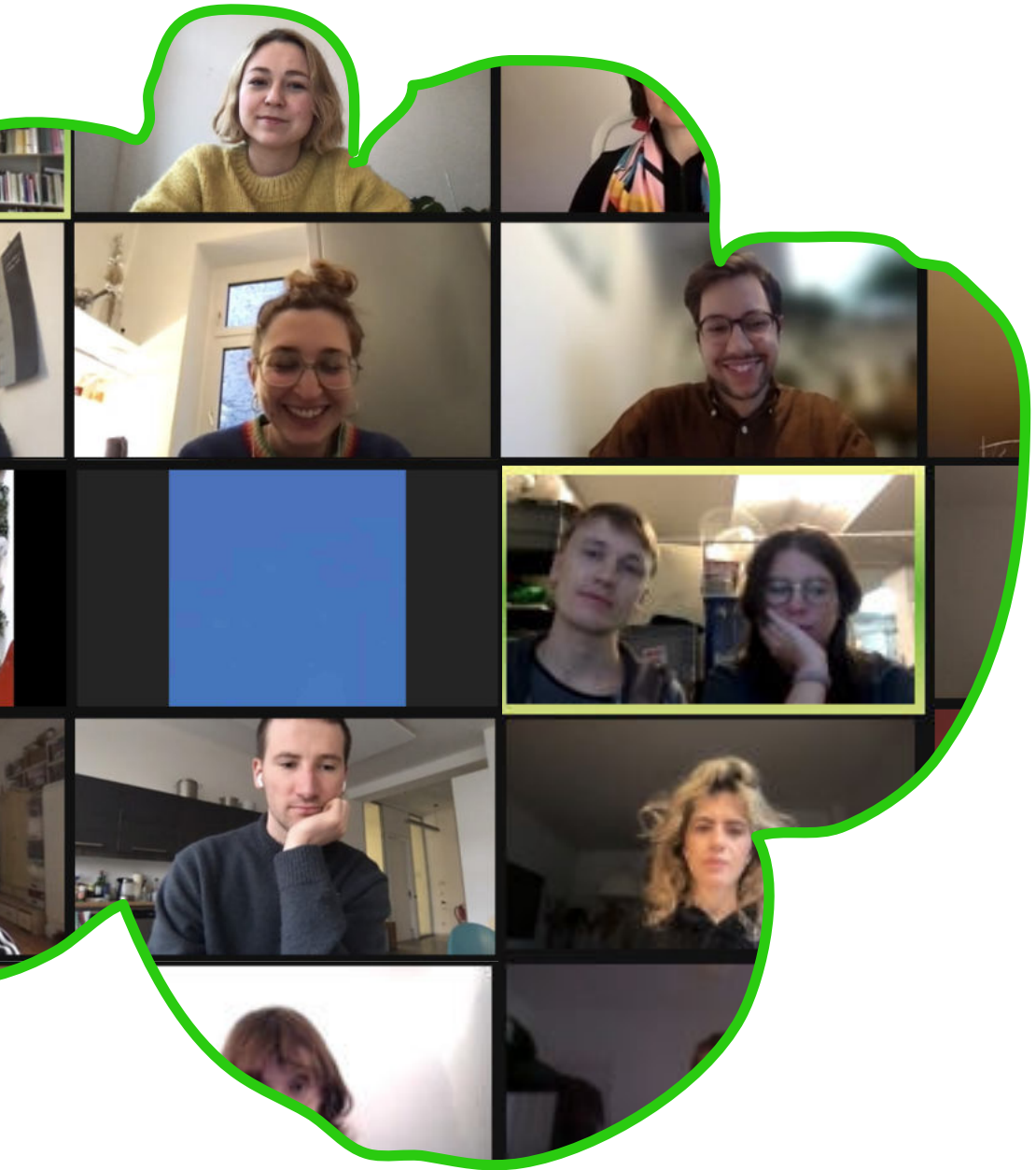


D

SEMINARS

Responding to Crisis





Seminars: Responding to Crisis

Responding to Crisis

Prof. Gesche Joost and KM Ben Siegler

During the seminar 'Responding to Crisi' several guests from the international art-, design- and activist scene were invited to talk about how we can respond to the multifaceted impacts of climate change – and how we can push back politically, artistically and through design and activism. In the end the project gave us diverse perspectives of sustainable transformations of our societies.

Each session consisted of a 15 minutes recap of the last session by a student, a one-hour talk/presentation by the respective guest and a half-hour discussion in the group.



Guests:

Joana Moll

**Leo Fidjeland+Linnea Vaglund:
Nonhuman Nonsense**

Klasse Klima - Udk Berlin

Cesy Leonard: Radikale Töchter

Rosaria Taddeo

Daniel Irrgang: Critical Zones

ZKM Karlsruhe

Lily Grote - Netzwerk N

Maike Gebker+Anna Eckl:

MA Transformation Design

Gitanjali Wolf - Wigwam

Iva Cukic- The Ministry of Space

Pauline & Hanna - Balkanbrücke

Mona Sloane: NYU



Seminars: Responding to Crisis

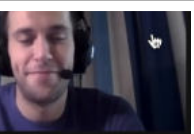
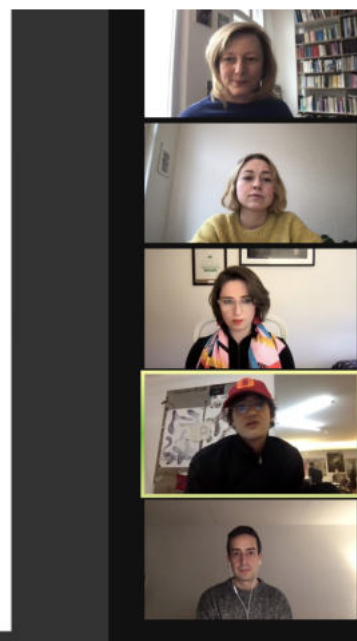
Prof. Gesche Joost

KM Ben Siegler



Responding to Crisis' group with Gesche Joost and Ben Siegler

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"description": "Knee" "score": 0.7872083	"description": "Flesh" "score": 0.6318554	"adult": "VERY_LIKELY", "medical": "VERY_LIKELY", "racy": "VERY_LIKELY", "spoof": "UNLIKELY", "violence": "UNLIKELY"
"description": "Abdomen" "score": 0.74494565	"description": "Chest" "score": 0.6096122	
"description": "Human leg" "score": 0.7446519	"description": "Navel" "score": 0.54820687	
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"description": "Trunk" "score": 0.702295	"description": "Wrist" "score": 0.5232421	



Linus recapping Corina Canali's talk

My work for the seminar:

I did a recap presentation of Iva Cukic talk "Searching for the Just City - Practices and Visions". Iva is a passionate activist and the founder of Ministarstvo prostora (Collective Ministry of Space), introduced us to Belgrades squatting scene and was talking about her diverse experience with the democratization of urban planning in Belgrade.

The Ministry of Space fights for a city that benefits the entire population and against corrupt practices, the misappropriation of common goods and the abuse of power by political actors. For this, they connect people around the theme of city development through citizen participation projects that strive for the 'just city'.

Seminars: Responding to Crisis

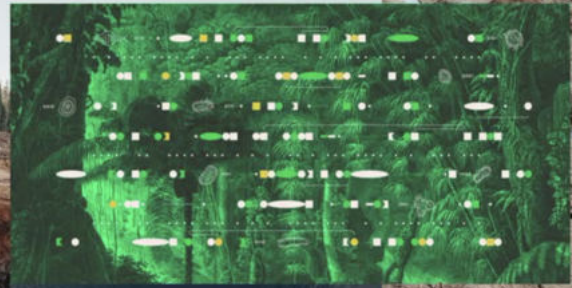
All in all, Gesche's seminar was definitely the perfect input at the right time in the right order for my master topic. My rare approach 'how to decentralize the human in the anthropocene', with which I started the semester, has continued to develop and change, especially through these seminar's talks:

Nonhuman Nonsense: Especially their 'Pink Chicken Project' got me excited about speculative design and how strong it can act in showing utopias and distopias with a realistic claim using actual technologies. They also inspired me to explore our relationship to the nonhuman.



Radikale Töchter: Their presented working method of Action Art inspired me to think about a term 'Design Action' and if temporary design interventions in public space could function as activist work.

Daniel Irrgang: Through his talk "Critical Zones Study Group. Preparing a Thought Exhibition with Bruno Latour' I came across the core approach of my masters: Viewing nature and culture as one sphere, not as separate ones. Afterwards I visited the Critical Zones exhibition in Karlsruhe and had a consultation with Daniel on Human Exceptionalism and the difference of Posthumanism and Transhumanism. Daniel sent me afterwards some literature on Transhumanist Eschatology that now supports my MA thesis.



Maike Gebker from Hfbk Braunschweig MA Transformation Design: In her talk 'Artificial Nature' Maike presented the research of their Master theses surrounding the role of humans and technology as a part of nature in the context of present and future social and ecological interventions. With her project 'Forsy-A', she developed an AI as an Forest -Symbiotic Agent that makes understand us nonvisible elements of the forest's condition through sensory technology. It is a very similar approach I have for dealing with city trees.

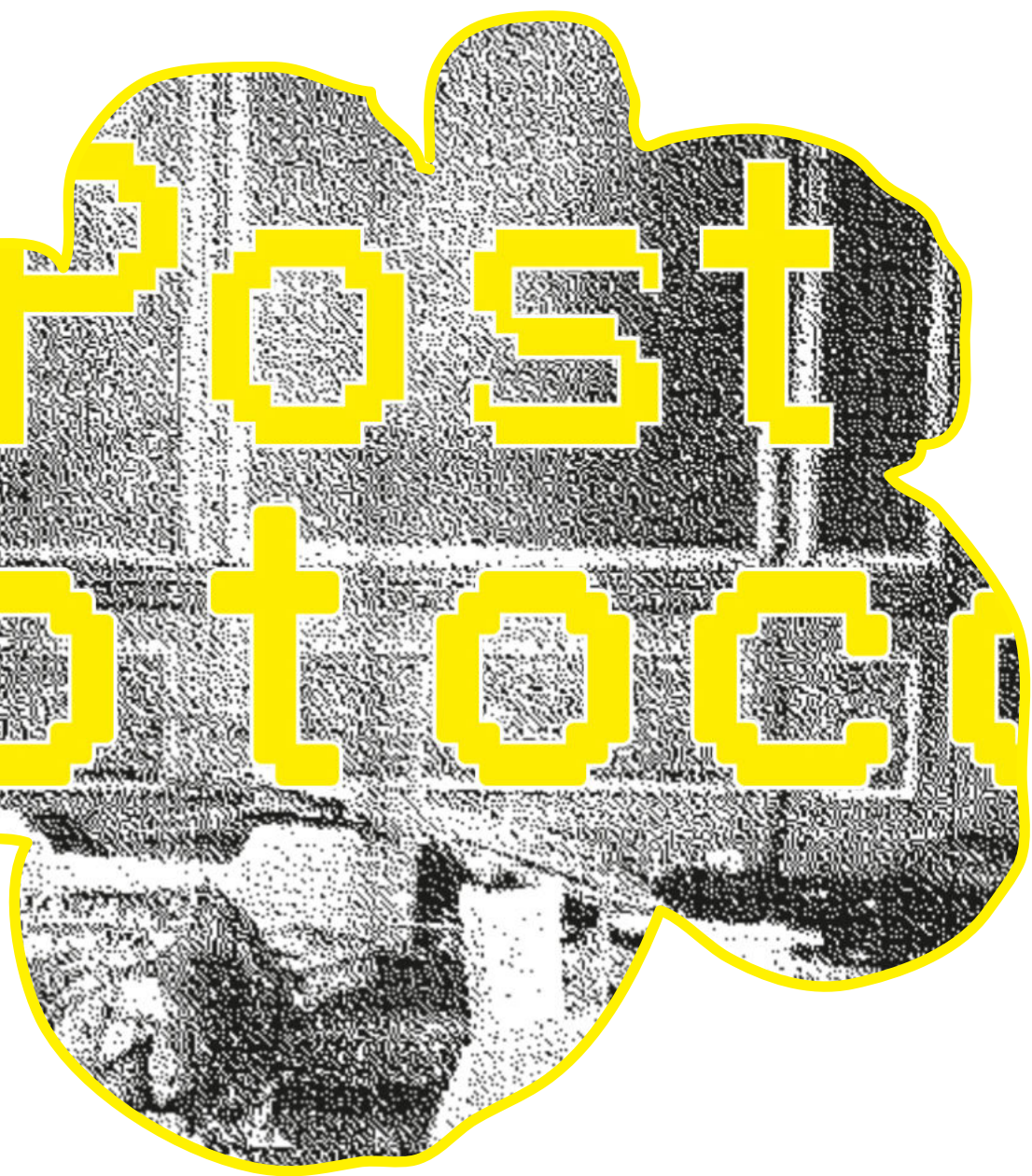
A few weeks later, I had a zoom call with Maike in which we discussed my approach of connecting city trees with each other via an artificial network system to let them communicate their needs. The most interesting points for me were if technology could be an own actor of an ecosystem and if nature would accept it as a real part of the ecosystem, maybe even more than we humans would do. We also talked about the paradox she was like me dealing within her project: How natural is human action in nature and which principle do humans have to follow as an supporting actor for ecosystems on earth.

Mona Sloane from NYU: They are working on different projects associated with the intersection of technology, art, and social issues. What I kept in mind for my thesis is the question of human agency and non-human agency and that we fundamentally have to rethink the topic of agency when thinking about climate crisis as a result of human intervention.

SEMINARS

Post Protocol





Seminars: Post Protocol

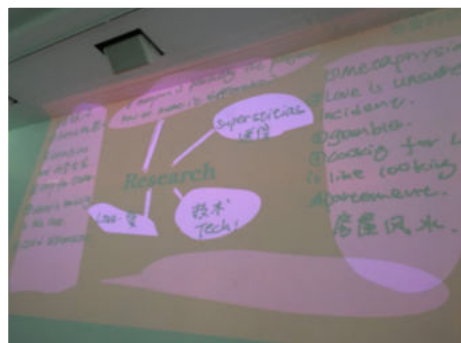
Post Protocol

Prof. Lukas Feireiss

Post Protocol aimed to be a space for intense reflection, debate and experimentation in a cooperative co-learning environment to selected graduate students. Since the seminar has been built up and structured over time by the group, it has developed into a kind of workshop or think tank with many small rituals that are carried out weekly.

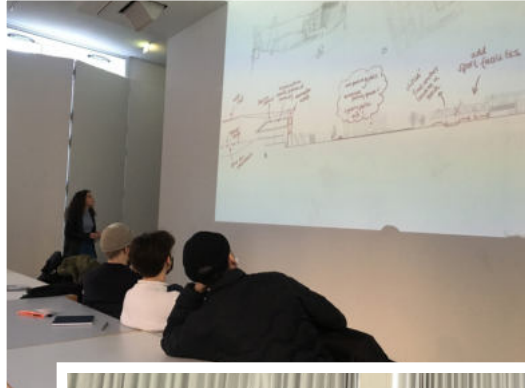
We were a diverse group of Master students from 14 different faculties (like Fine Arts, Architecture, Design, Costume, Acting, GWK, Music,..). Within the group, we took the first two weeks to figure out how to use this seminar for our projects as a tool:

Each session is set up in a different location of the Udk, every week, two friends or colleagues are invited by Lukas to join the colloquium, two students present their project they would like to talk about in a very draft not finished stage to the group and the guests. An intense discussion and feedback round of a very transdisciplinary group should support the student to get a wide range of input by, in best case, people with different perspectives they had so far in feedback rounds.



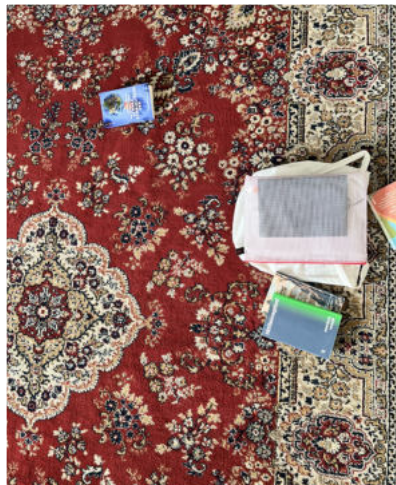
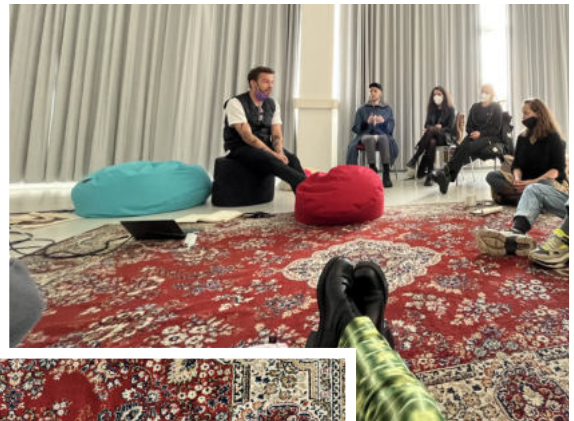
Locations:

Mierendorfstrasse 30
Berlin Open Lab
Hardenbergstrasse 33
Salzufer 14
Grunewaldstrasse 2-5
Strasse des 17. Juni 118



Guests:

Ahmet Ögüt
Pamela Owusu-Brenyah
Matylda Krzykowski
Rachel Libeskind
Prof. Timothée Ingen-Housz
J'Kerian Morgan aka Lotic
Alexander Gutzmer
Rebecca Raue
Constantin Hartenstein
Florian Hadler



Seminars: Post Protocol

In the end, we developed quite naturally rituals that guide us every week through the session:

14:00 CHECK IN

everyone says hello and how he/she is feeling today, if anything exciting happened this day, or if he/she won't be able to talk a lot,...

14:15 BOOK CLUB

one is presenting books lying on his / her table- read or unread

14:30 PITCH

If anyone would like to pitch a personal or a friend's project, exhibition, ... he/she has the chance to promote it now

14:45 WALK'N TALK

having a small walk around the block with a person we haven't talked to so far (only in groups of 2), having each time a conversation about anything we want with another student colleague

15:00 PRESENTATION NO 1

one student presents a project at any stage that he/she would like to discuss

15:20 FEEDBACK ROUND NO 1

everyone in the circle has the possibility to give references, criticism, questions and any other input

15:55 RECAP BY LUKAS

In the end of the feedback round Lukas is recapping and structuring the given feedback

16:00 PRESENTATION NO 2

16:20 FEEDBACK ROUND NO 2

16:55 RECAP 2 BY LUKAS

17:00 WEEKLY CRUSH

If anyone had visited, watched, listened to something that they were instantly 'in love' with, he/she can share it with the group.

17:05 CHECK OUT

small check out round, in which we have time to say goodbye, thank you and to reflect on the session or give suggestions for the next one

-> TELEGRAM GROUP

every input given within one session is collected in a telegram group which is now a pool full of references

Seminars: Post Protocol

My project presentation at Post Protocol was joined by these two guests: **Rachel Libeskind** and **Prof. Timothée Ingen-Housz**. Both of them, as well as the group, gave me rich feedback and new input within my topics.

Rachel Libeskind contributed to the 'Critical Zones' exhibition at ZKM in Karlsruhe with 'The Great Debate has no Description' about inhabiting and inheriting the terrestrial earth.

Timothée Ingen-Housz holds a professorship in GWK at Udk.

DRIVING THE HUMAN

The Sunday Read: 'The Social Life of Forests'

Trees appear to communicate and cooperate through subterranean networks of fungi. What are they sharing with one another?

Produced by Kelly Prime; edited by John Woo; written and introduced by Ferris Jabr; and narrated by Julia Whelan.

CONCERT FOR THE BIOGENE

2020

'Sweet City': the Costa Rica suburb citizenship to bees, plants and trees



Most important references and thoughts of the feedback round:

There have been a lot of interventions that excluded the biosphere from urban life. How about interventions that include the biosphere into urban life? -> The Datafication of Forests by Bruno Latour.

There is a gap between tree politics and polemics in the general narrative of interconnectedness. Trees have only a polemic but no political status. How to bridge this gap?

They came up with the term 'ecosystem service' what actually describes my desired output of the master project.

The subjectivity of trees is essential in the debate of a more tree-friendly city. -> Subject-Object Dualism
What if the biosphere is given personal rights.

It started with 'Decentralizing the human'. After this discussion, I realized, it is not about 'DE-' something, but INcluding.

On top of that, I collected a huge reading recommendation list.

... that gave
... es

... ng, is there to say about the intelligence of plants?
... e best way to conceptualize plant intelligence?


Talks: JUXTAPOSITIONS

The accompanying lecture series JUXTAPOSITIONS is also curated by Prof. Lukas Feireiss. I attended the talks of Samir Bantal, Nicolas Bourriaud, Sol Calero, Hans-Ulrich Obrist and Oana Stanescu.

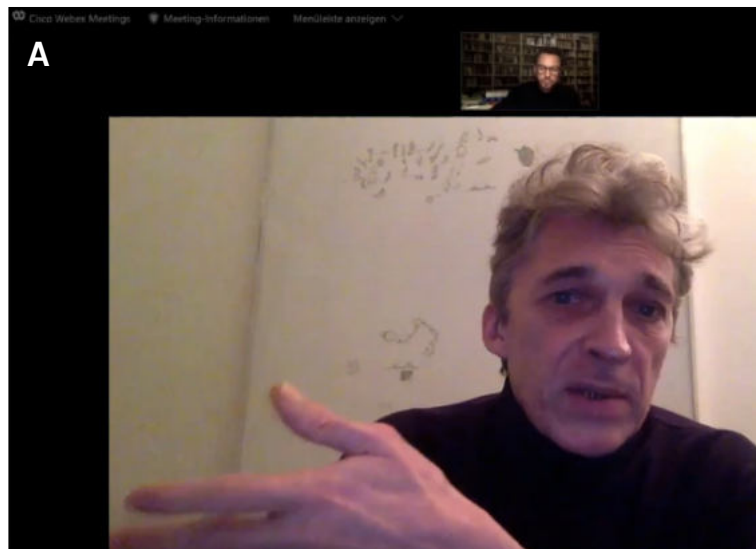
Especially the talk with Nicolas Bourriaud fit perfectly to my research stage at that moment.

Most interesting for me was him talking about what are the new parameters today? what defines today's aesthetics? what defines the capitaloscene?

The discussion around the common nature culture dualism and about 'the end of distances' through technology caught me next.

Also the image of a loop when thinking about the selfcolonisation of human space is interesting- with the densification of human settlements, there is 'no space for spaces'. How can we escape this loop?

A: Screenshot of the talk with Nicolas Bourriaud
B: JUXTAPOSITIONS Flyer



B

Public Lecture Series English, 2 SWS, 2 ECTS (Studium Generale)

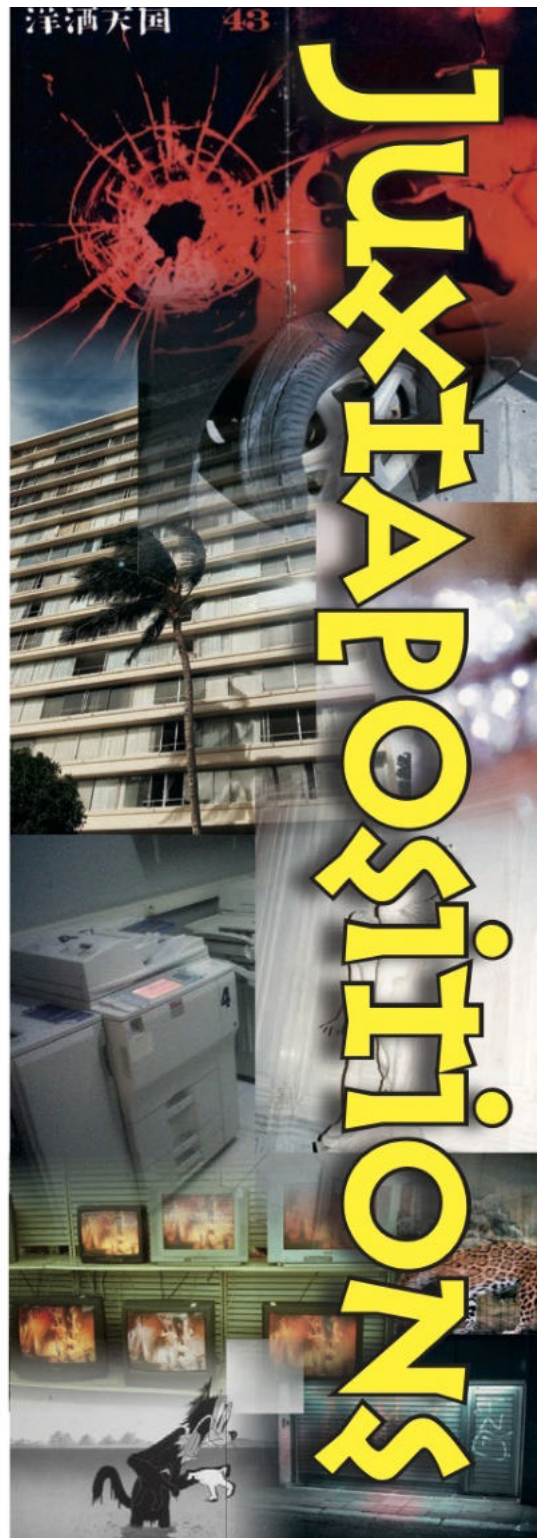
In the winter semester 2021/22, the Studium Generale is organizing a series of hybrid lectures on the topic of contemporary cultural production. Curated and moderated by Guest Professor Lukas Feireiss *Juxtapositions* aims at a broad cross-disciplinary audience.

Against the backdrop of the accelerated proliferation of digital technologies in nearly all areas of life, the lecture series pays special attention to the impact and influence these ubiquitous media have on creative processes today and the creation and consumption of popular culture worldwide. Many forms of contemporary cultural production absorb the ever growing pool of source material made possible through these new digital conditions. In a constant revision of what is being created this digital do-it-yourself culture allows everyone in the internet to be simultaneously artist, producer, collaborator and spectator, but equally being participant, subscriber, friend, and follower. Digitization is thus also turning the art and culture industry upside down. It creates new access points, new ways of working and thinking. It also makes new forms of financing possible. But it also brings new dependencies – it changes art, cultural production and the future of work as a whole.

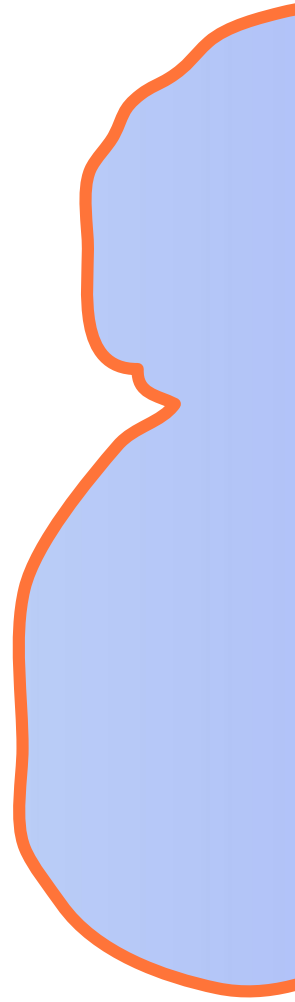
With talks by: Samir Bantal,
Nicolas Bourriaud, Sol Cale-

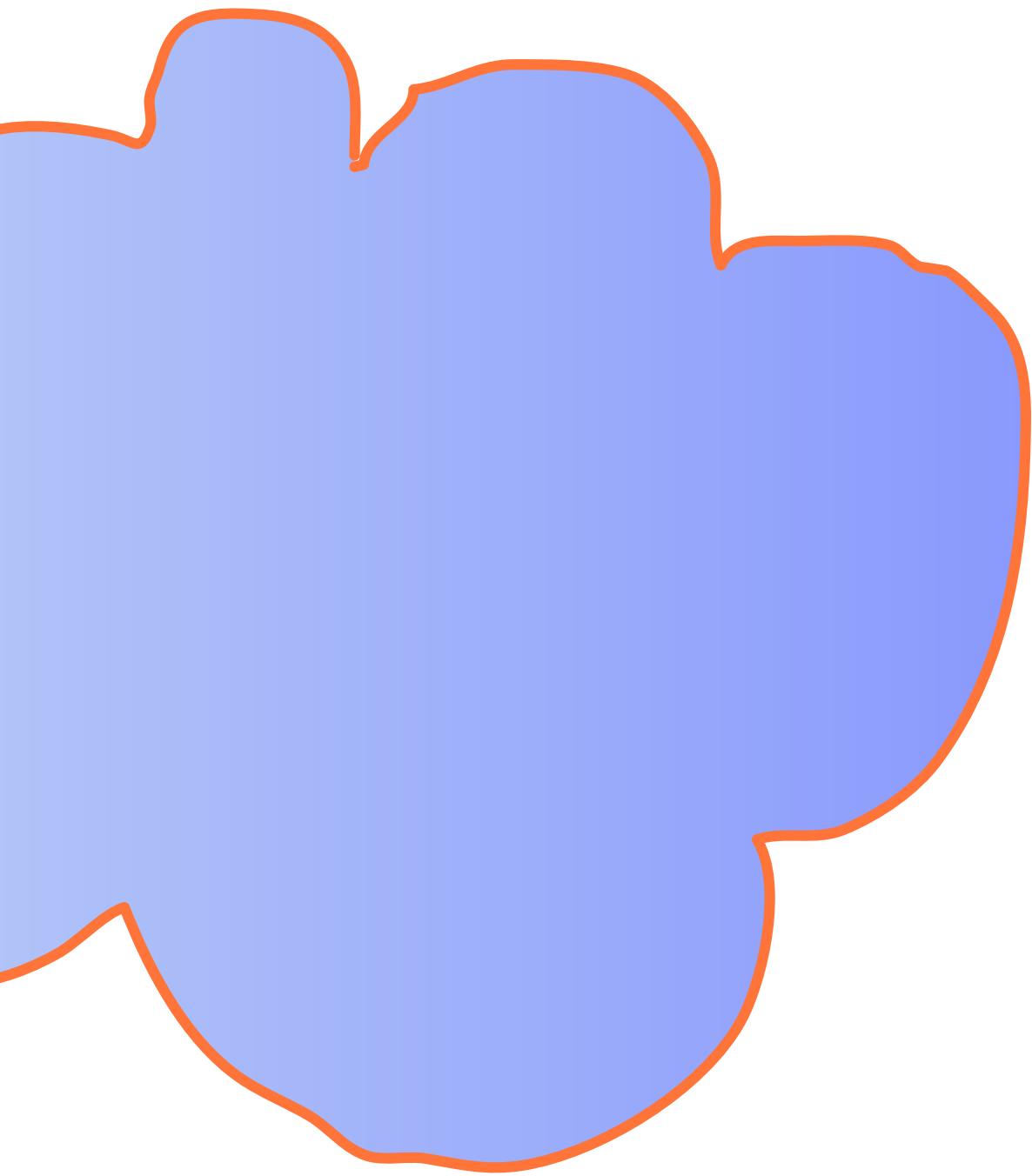
a Franklin, Isaac
sanne Kennedy,
rzykowski, Katia
a, Hans-Ulrich
isk Social Club,
aire, Yehwan
a Stănescu and
liams.

tät der Künste Berlin



KOLLISIONEN





Kollisionen

Exposé: Thinking like a tree

In my master's thesis I am investigating how we can decentralise the human in the anthropocene city through design. The focus on the non-human as the duty of humans in the Anthropocene is the starting point of my project. My current research topic in this context is the communication network of trees in the city.

Without trees, our cities could not exist. Supporting our very lives here, it cleans and produces the air we breathe; it regulates our microclimates, cools our sweltering asphalt and concrete landscapes; it provides stability to our soil, and our rivers; it creates the conditions for increased biodiversity, offering home, habitat, and shelter for so many other living things who, in turn, lend their services to innumerable other parts of our urban ecosystems.¹ With our current anthropocentric ways of dealing with nature, we have left the needs of the tree last in the street design and construction process. Street trees are squeezed into whatever space is left after other functional and engineering needs have been met. The consequences have been declining tree health and longevity, tree mortality and infrastructure damage.² Thus, unlike forest trees, which can communicate via roots and fungi, the communication of trees in the city is cut off through our urban design which has a major impact on the tree's wellbeing.

This week is about ‘thinking like a tree’ and visualizing a city environment that is made up for them, accepting that a tree’s intentions and needs might hold as much value as our own.

What would a city look like if trees as a community had complete control over the development? What human artefacts would they choose to use to live in the world we created. Would trees allow concessions to humans, judging them by nature’s growth requirements. And how would this utopia affect the human part?

The end result of the week is a collection of visualisations of my research on forest- and city trees. Possible outputs are illustrations, collages and maps.

As part of my master project, the aim of 'Kollisionen 2022' is to practice a non-human centered design thinking and to identify possible needs of the non-human/ the trees in cities that could be met through design.

1 www.thenatureofcities.com/2018/09/12/city-designed-trees/

2 treenet.org/resources/thinking-like-a-tree-developing-a-framework-for-tree-sensitive-urban-design-martin-ely/

Kollisionen

Natural Zone

Rural Zone

Suburban Zone

Urban Zone



Ecological

Agriculture

Idyllic Woods

Walkable Streets

needs of the trees

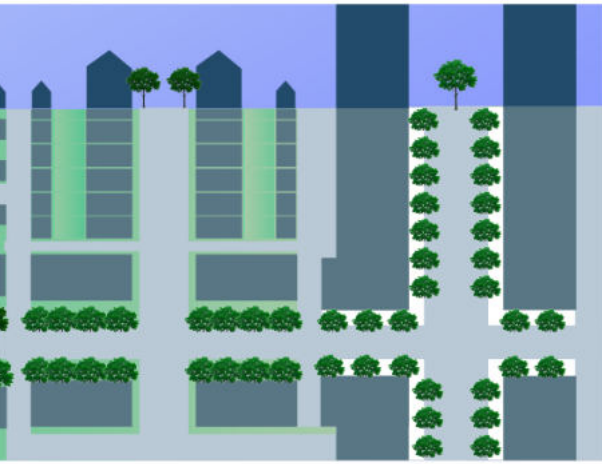
benefits for people

Trees in different zones as human's objects

City Trees Breaking Free

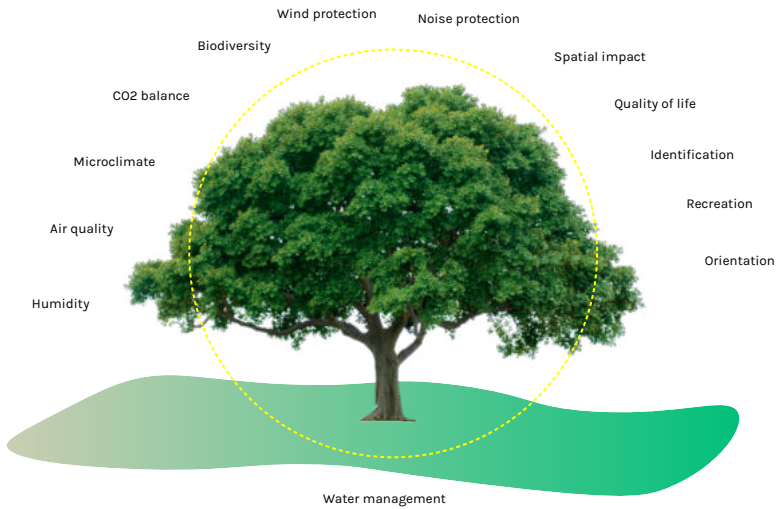
Urban Center Zone

Urban Core Zone



Shade and Artistry

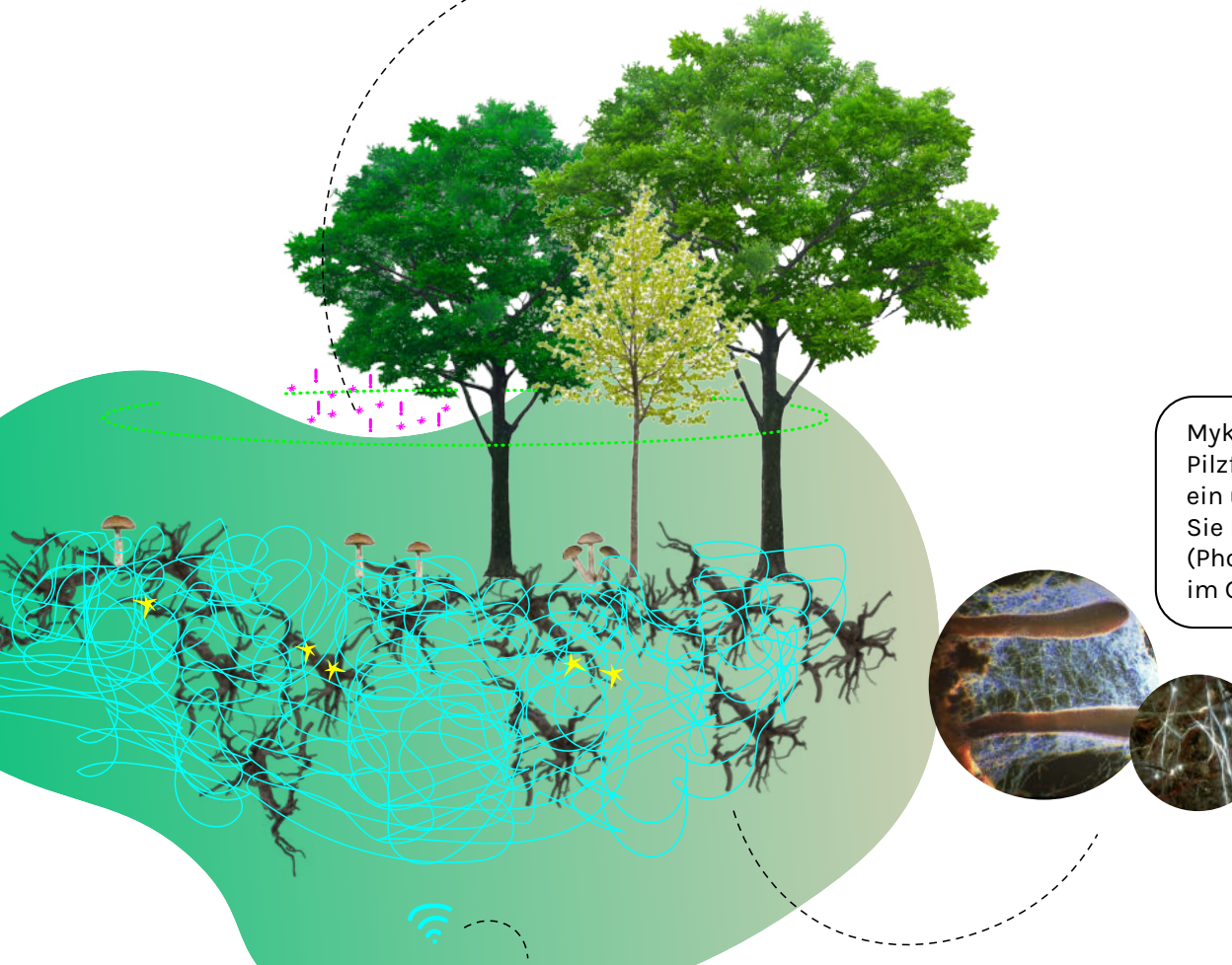
Human Delight



Kollisionen

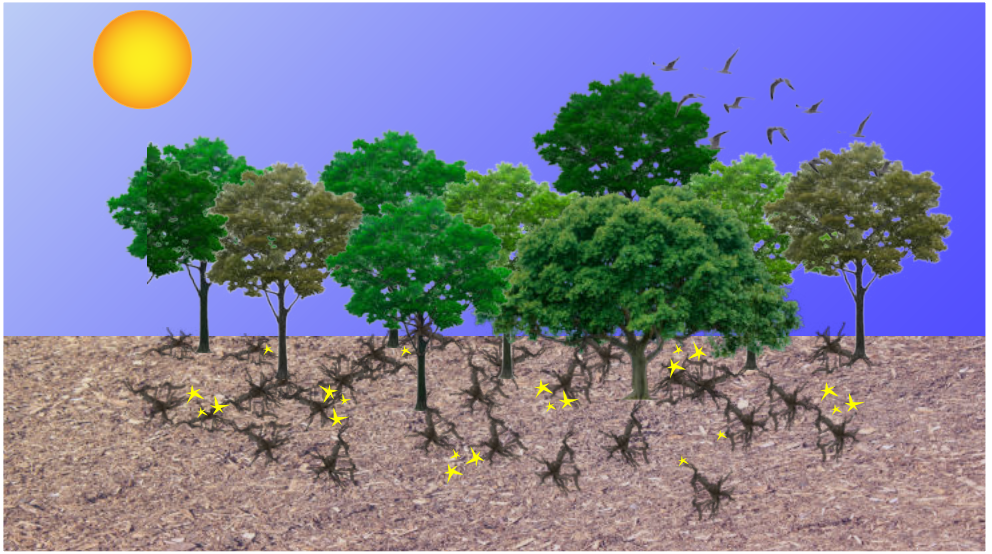
The Social Network of Forests: Forest tree in a complex 'Internet'

Duftstoffe Terpene
Durch Ausstoßen von Duftstoffen werden umliegende Bäume zum Beispiel vor Krankheiten gewarnt

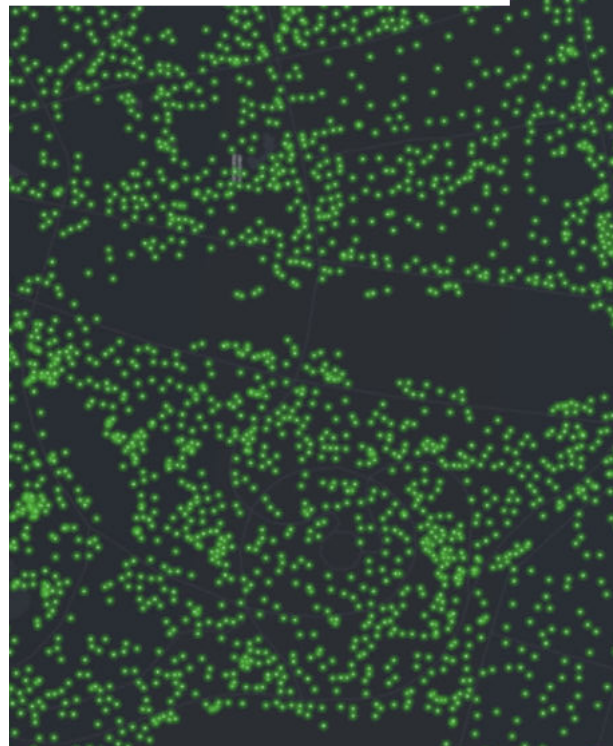


Myk
Pilz
ein
Sie
(Ph
im C

Wood Wide Web
Die Pilzfäden übermitteln die elektrischen Signale der Bäume und vernetzen die Bäume so über Kilometer untereinander

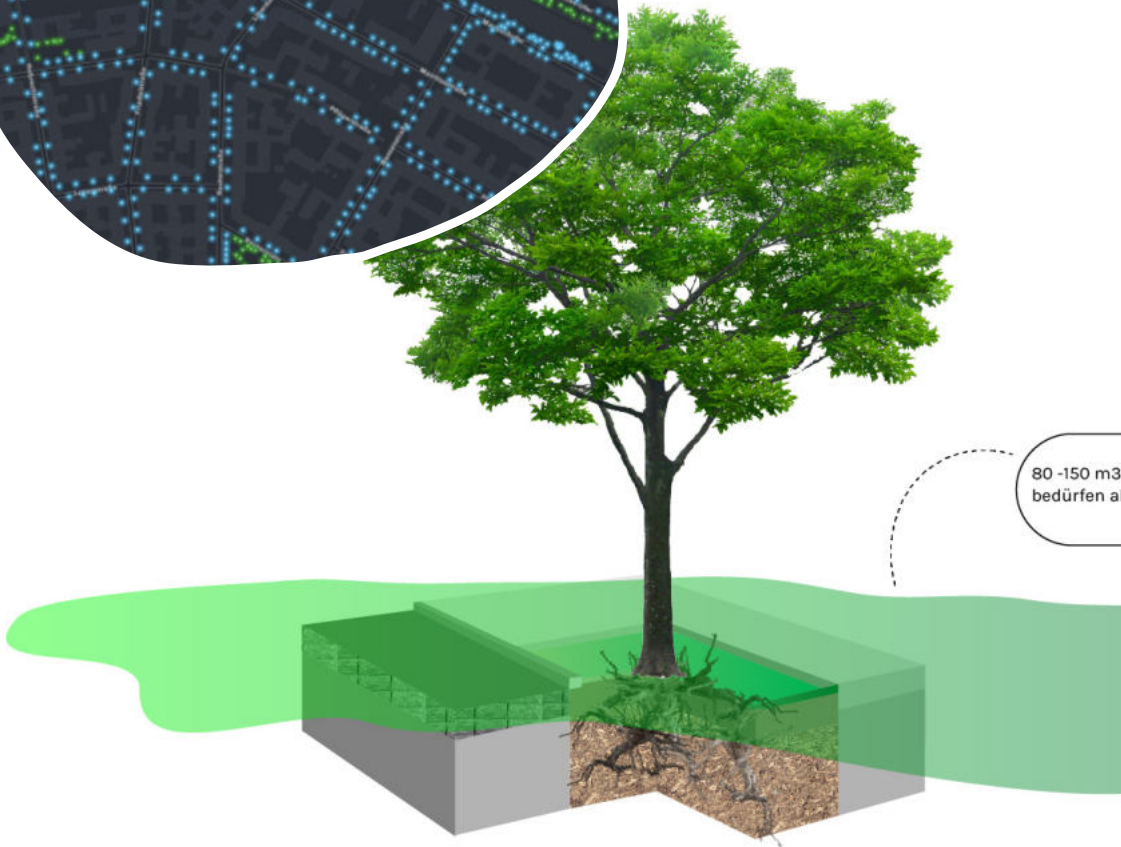
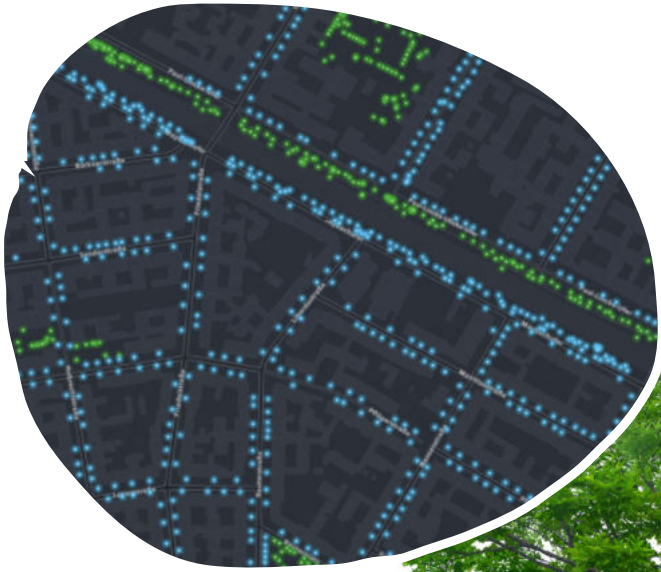


Mycorrhiza Pilze
Die Pilzfäden gehen eine Symbiose mit den Baumwurzeln
ein und bilden ein kilometerweites Netzwerk.
Sie liefern dem Baum Kohlenstoff und Nährstoffe
(Phosphor und Stickstoff) und verlangen vom Baum
Gegenzug Zucker aus der Photosynthese.

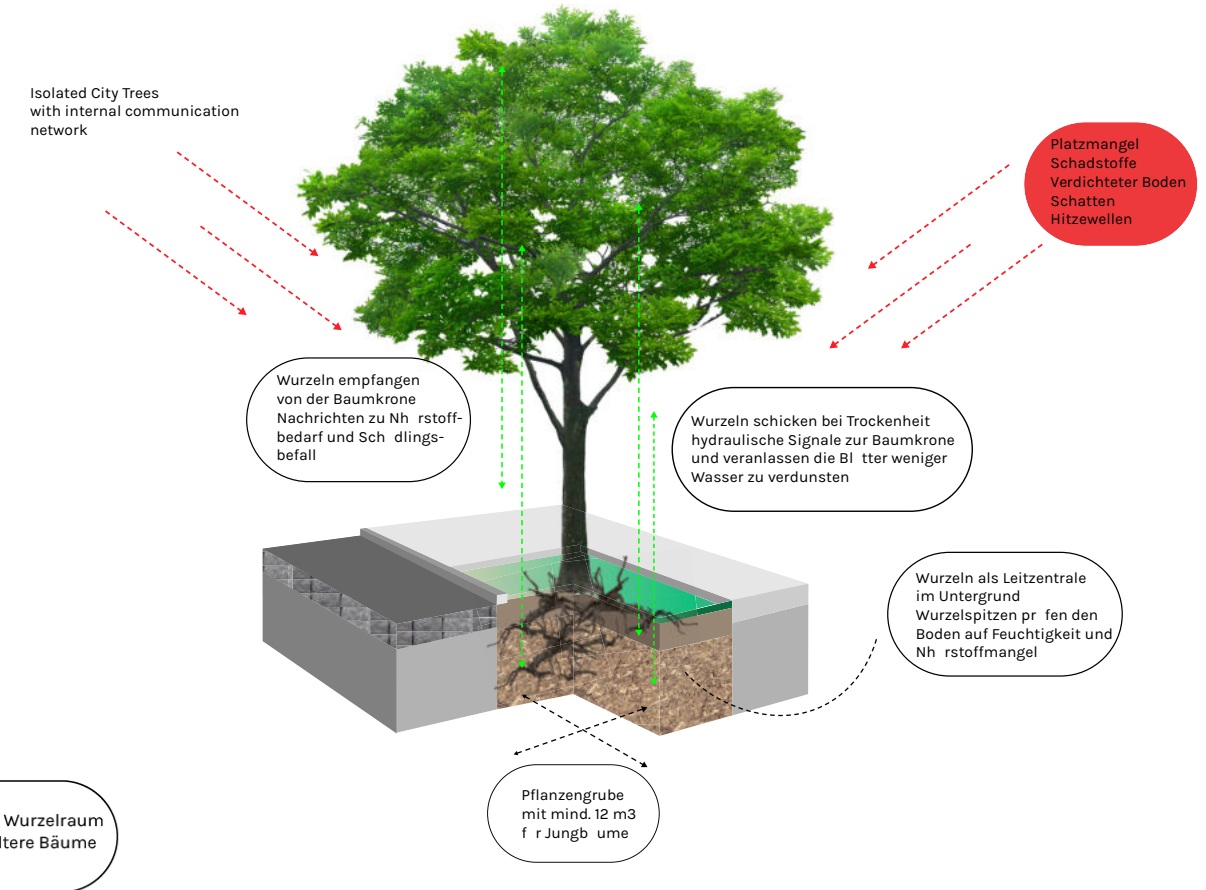


Kollisionen

Isolated City Trees integrated as loners into the city in a grid structure.



City Trees Breaking Free



Kollisionen



What would be the first official act of the trees if they had control over their environment in cities?
City Trees breaking free: Trees in need of social contact!

City Trees Breaking Free



Kollisionen



City trees experience severe limitations in the Anthropocene and are in need of a social network to not only survive but to thrive in a city's ecosystem.

How to design an relationship or communication system for trees in urban circumstances?

Contrary to my expose, I have spent less time on designing an utopia than on visualizing my research. Still I have come to a central point to my question: What are the needs of urban trees that do I want to met through design? City trees are in need of a social network to no not only survive but to thrive in a city's ecosystem. The illustrated utopia of trees breaking free to connect seems impossible in our cities. Sealed floors are needed by people with whom trees share their space in cities.

Nevertheless, this week has shown that I want to work further on social needs of trees in cites. After the Kollisionen, I first came to the approach of designing a relationship or a communication system for trees in urban context allowing trees to communicate their needs to each other and/ or to human. The mycorrhizal fungal network represents my main inspiration at this point.

WORKSHOP

Louise Schownebourg
on Auto-ethnographic De



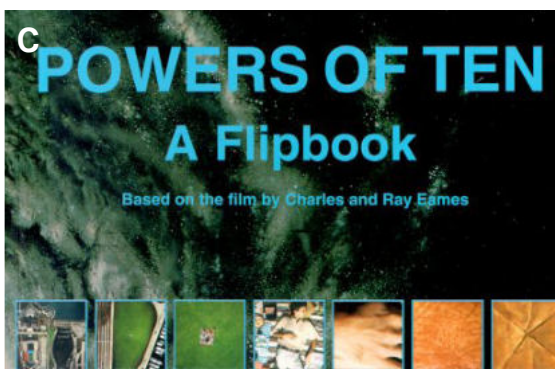
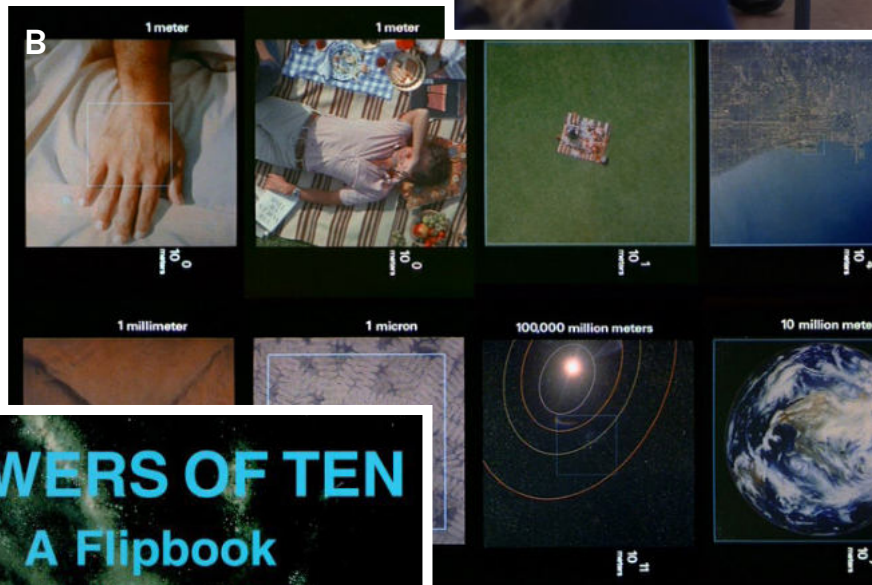
esign



Workshop: Louise Schownebourg

Louise's workshop dealt with the auto-ethnographic research method which entails us as designers to take our own personal fascinations and experiences as starting points for research.

In doing so, autoethnographic design resists the temptation of solutionism and the spectre of pragmatism to remain at the intersection of research and expression by offering critical commentary, deep insights and elaborations on particular social and material relations.

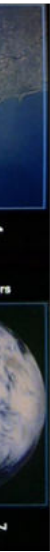




A: MA group discussing with Louise at the studio

B: Screenshots of the shortfilm 'Powers of Ten'

C: Flipbook 'Powers of Ten'



As a start each student brought a, object or an even which is inspiring in best case connected to our thesis research. The first day was about presenting the object related to our personal fascination as well as to our master topic.

I brought the 'Powers of Ten' Flipbook by Ray and Charles Eames. The connected film takes us every ten seconds, starting from a sleeping picnicker, ten times farther out until our own galaxy is visible and then returning to Earth moving inward- into the hand of the sleeping picnicker - with ten times more magnification every ten seconds. I always liked the smart simplicity with which this book shows our whole universe. Referring to my master topic, it kind of addresses the interconnectedness in the world and makes us aware that we all live on the same small planet. In my view the work with zooming in and zooming out describes pretty well how we constantly work in design.

Workshop: Louise Schownebourg



Before starting the workshop, Louise sent us some advices for reading and viewing connected to our master topic. For reading, her advice was the short story 'La Désalpe-Traditions as an Ever-Evolving Search for Collective Experience and Transformation' extracted from her book 'The Auto-Ethnographic Turn in Design'. The short story tells about cultural reenactment, a tradition in summer season in the swiss prealps.

A few sentences stuck with me in this story: that staged rituals happen independently of truthfulness and create a kind of Disneyland. They bring out the fantastic in the everyday and create a new meaning out of the familiar.

Can we recreate the romantic concept of nature in cities?



Louise's advice for viewing to me was the work of Minji Choi. The Water Garden, that was commissioned to be part of the WaterSchool exhibition in Milan during Salone del Mobile 2019, inspired me the most.

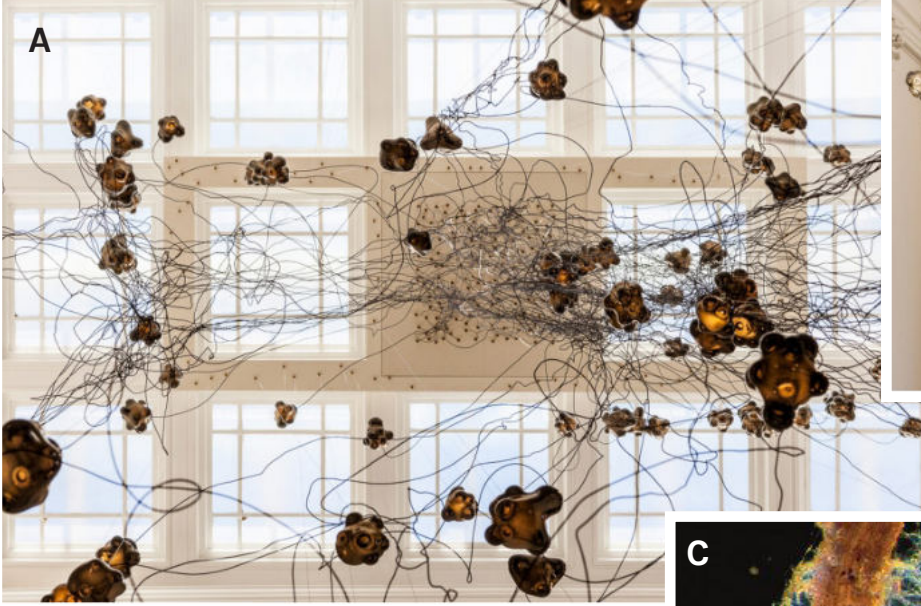
It 'aims to celebrate water in relation to the central role it plays in allowing plants to freely grow in man-made environments.'¹ By taking the visual features of rumbustious plants as the main visual theme, the installation encourages to interweave the notions of natural and artificial.

¹ minji-choi.com/water-garden/

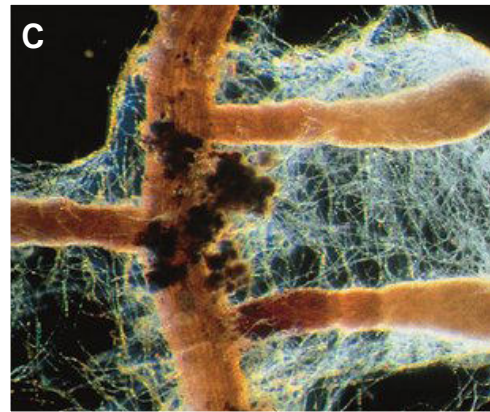
Interweaving the natural with the artificial has been from this point on my main focus for the thesis. How do overlap and interweave the technosphere and the biosphere in urban contexts?

Workshop: Louise Schownebourg

The second day was about fast scaling the object, that inspired us. Slowly, when there was still some time, we were asked to modify and change the object to turn it to our own .

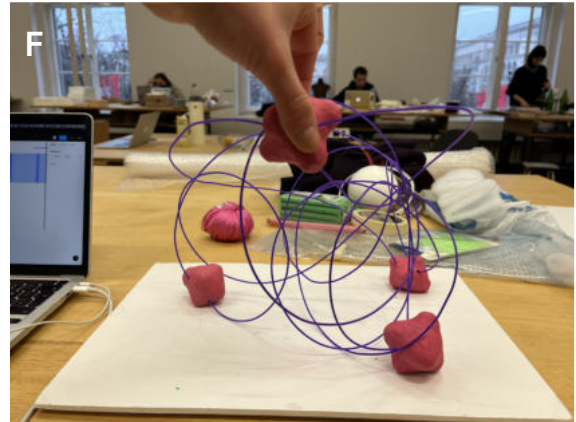
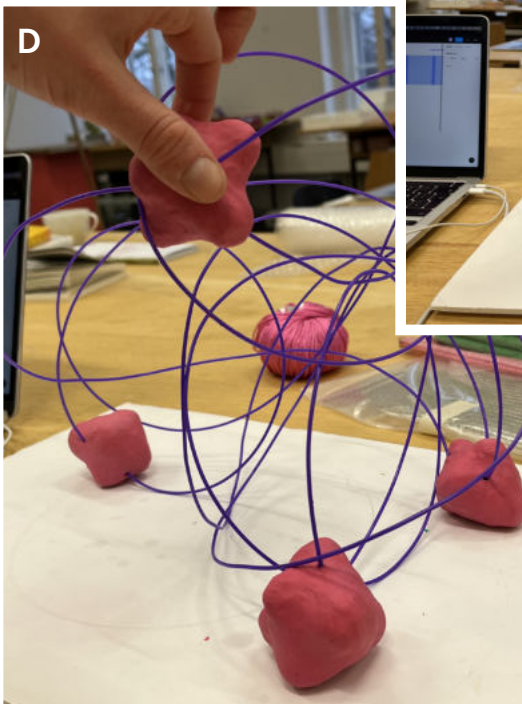
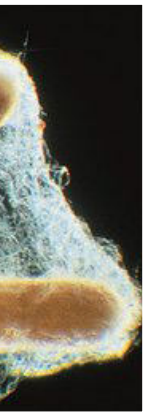
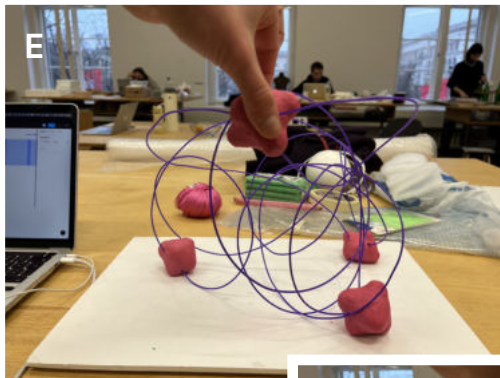


The Flipbook, I originally brought with me, was a bit difficult to deal with, so I thought about an object that inspired me in terms of the shape. My object, I worked with in the end, is the BOCCI lamp 57. I used to work at the Bocci79 showroom in Berlin and was absolutely overwhelmed by these almost fantastic light installations inside of the beautiful old empty district court. When I think about an artificial fungi network as objects, these lights immediately come to my mind.



Auto-ethnographic Design

Louise inspired me to think about 'Next Nature'. Her advice working speculatively and with a holistic design approach that cares for all species, formed my exposé further. In her view, my project would be more about a manifest, than a solution.



A+B: Bocci lamp 57
C: Mykorrhiza fungi
D-F: Fast scale
model

WORK ON MA





Work on MA

In addition to the above-mentioned points that I gathered during the seminars and workshops, I outline here a rough development of my Master's topic up to my final exposé.

I started the semester with the approach of 'How to decentralize the human in the anthropocene'.

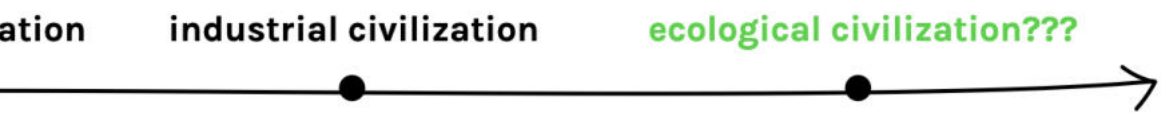
My introductory reading was 'Connectedness' ed. by Marianne Krogh which I bought at the Biennale in Venice. It wants to function as an encyclopedia of the anthropocene and made me understand that we coexist in one coherent, active system where every component has agency and meaning.

For Centuries we have assigned ourselves a central position as superior being, able to control our habitat by means of language, reason and consciousness. Plants and animals lack human language and consciousness which led us believe we have the right to exploit them for our own needs. The result of this constant separation of humans and nature is an obvious imbalance and a huge climate crisis.

My starting assumption is an awareness of the interconnectedness and that our industrial, capitalist civilization develops to an ecological civilization decentralizing the human as a human's duty in the post-anthropocene.

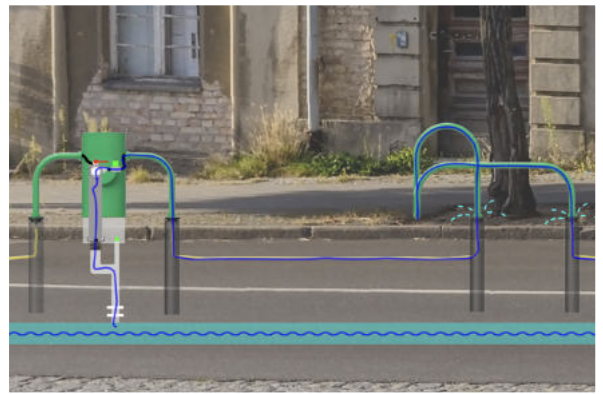
agricultural civiliz





Work on MA

I sketched 3 potential strategies to decentralize the human in urban space:



1: **Designing unselfish or even 'caring' objects** that integrate into citie's ecosystem and care for the nonhuman

2: **Designing parasitic systems** through which the non-human can reclaim the city



3 Strategies on how to decentralize the human



3: 'Transfloralismus'

Bridging the gap between human and nature through technology

Equipping nature with technology for being able to survive in the world we created.



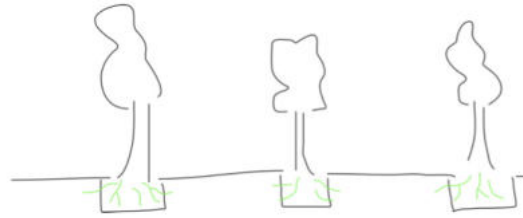
ADAPTATION LABORATORY: Adaptation Laboratory, par
täre Gewächshausinstallation von → Ingo Velti
Das Gewächshaus besteht aus einer aufblas
ten Kunststoffhülle, die wie ein → Parasit an d
Abluftschacht eines Gebäudes angeschlossen
ist. In ihrem Inneren steht ein Götterbaum (en
ghetto palm; lat. *Ailanthus altissima*) – eine dek
orative Pflanze, die im 19. Jahrhundert ursprüng
lich aus China nach Europa und in die USA ee
geführt wurde. Die Bäume wurden zunächst i
Gärten angepflanzt und verbreiteten sich rasc
im städtischen Raum, wo sie

Work on MA

City Trees:

Since I have already worked on a project with city trees, the discourse of connectedness triggered me when thinking about trees in urban areas that are squeezed into whatever space is left and that are left isolated in a very poor condition.

City trees are confronted with numerous different stress factors. When comparing to forest trees, my research has led me to the 'wood wide web' and the intelligent mycorrhizal fungi network.



Mycorrhizal fungi network and the 'wood wide web':

Fungal threads enter into a symbiotic relationship with the tree roots and form a network that extends for kilometres. They supply the tree with carbon and nutrients (phosphorus and nitrogen) and demand sugar from the tree in return sugar from photosynthesis.

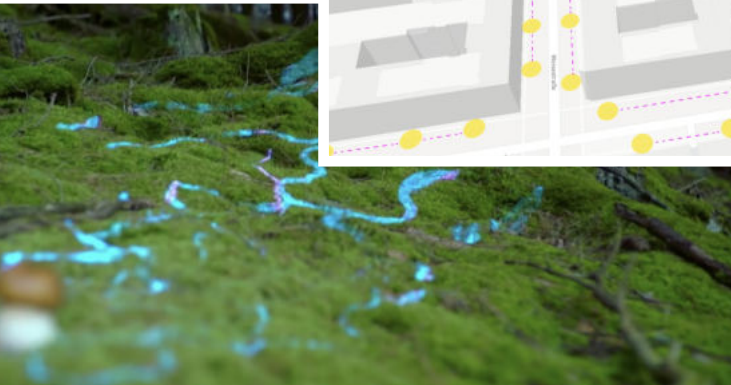
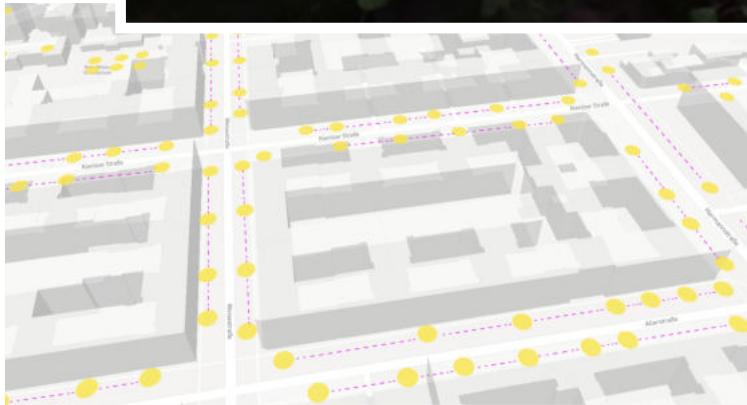
Wood Wide Web The fungal filaments transmit the electrical signals of the signals from the trees and thus trees with each other over kilometres.



Focus: City Trees

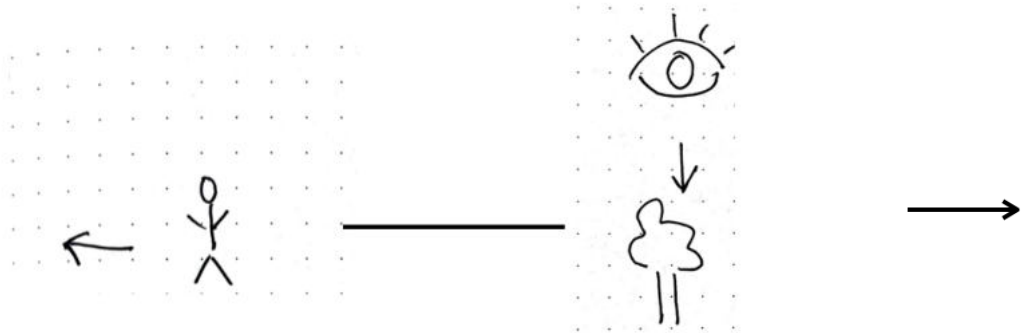


At this point, a first idea came to live: How to design an artificial fungi network for urban trees?



Work on MA

human-centered
↓
non-human-centered
↓
species-centered
↓
cross species / interspecies design ?

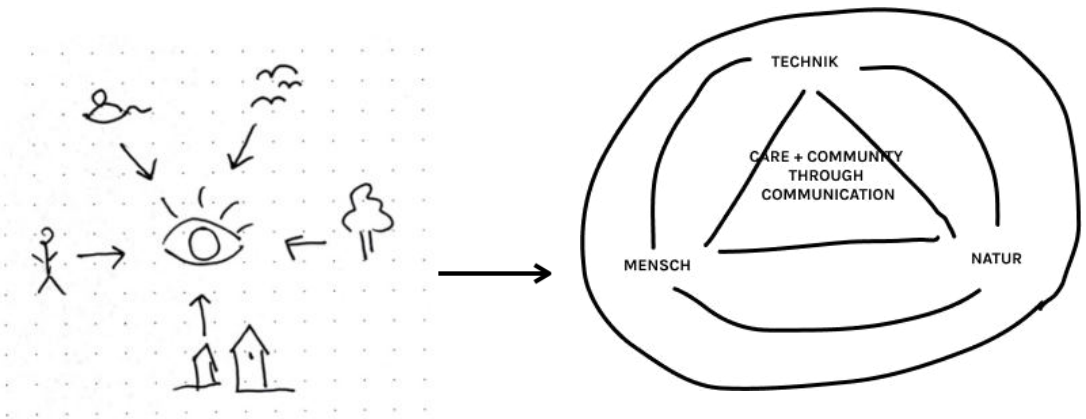


From DEcentralizing to INcluding:

Acting in an urban ecosystem, also artificial and 'dead' actors have to be included besides the natural and the human actors. This is why my non-human centered design approach turned to a cross-species or rather a hollistic design approach.

Seeing a dominant technosphere in urban contexts, my research at this point was about future nature topics and the interweaving of technology and nature.

Technosphere and Biosphere



Human x Nature x Artificial:

Technosphäre - Biosphäre

classic binary: Nature- Culture

natural -artificial

object-subject relation



Andreas Weber: Indigenialität

Graham Harman: object-oriented ontology

Bourriaud: end of distances, --> technology should destroy the distances

Timothy Morton: Ökologie ohne Natur
neuer Naturbegriff

Work on MA

Symbiosis / Synergie Nature + Artificial

Interweaving Biosphere + Technosphere



Alternative Form of Coexistence

Artificial Nature
Neuer Naturbegriff



1 Service Design for Nature -> better well-being

+

**2 Communication of nature's condition
-> bridges the gap between nature and human**



Trees are INcluded, become subjects!
Goal: emotional relationship to nature

'TRANSFLORALISMUS':

Merging of the artificial and the natural as a post-anthropocentric strategy: bridging the gap between human and nature through the artificial to enable an interconnected community in which every actor is taken into account.

Other Projects dealing with this topic:

Part of my research is a constant collection of references that deal with the topic of working with trees in the intersection of nature and technology. Bruno Latour's *Datafication of Forest* is a great inspiration. Also Maïke Gebker's Master project *Forcy-A* is dealing with introducing the forest to the technosphere. *Treemanía* is a sensory company from the Netherlands, that deal with technology that can be interesting for my practical project.

So far, all of the projects I found focussed on the forest. The intersection of trees and technology in an urban context is, compared to the forest context, not that present yet.

MA Exposé

Reading List (ongoing):

Andres Jaque und Lucia Pietroiust (eds.): More Than Human

Andreas Weber (2018): Indigenialität

Anthony Dunne und Fiona Raby (2013): Speculative Everything

Bruno Latour und Peter Weibel (eds.) (2020), Critical Zones. The Science and Politics of Landing on Earth

Donna Harraway (2002): Die Neuerfindung der Natur: Primaten, Cyborgs und Frauen

Form 294 (2021): Natur

Graham Harman (2018): Object-Oriented-Ontology: A New Theory of Everything

Marianne Krogh (ed) (2020): Connectedness: An Incomplete Encyclopedia of the Anthropocene

Peter Wohlleben (2015): Das geheime Leben der Bäume

Ray Kurzweil, The Singularity Is Near (2005): When Humans Transcend Biology

Timothy Morton (2016): Ökologie ohne Natur

Timothy Morton (2017): Humankind: Solidarity with Nonhuman People

Contacts:

Baumpflege - Helo Hering Darmstadt
Biologie - Rosanna Escobar Design Academy
Umwelttechnik - Tizian Schmidtler TU Berlin

Stadt Berlin -

IT -

Sensory Technology - Treermania, NL ?

Anthropocene Curriculum HKW?

Climate Change Center Berlin?

Supervision:

Entwurf: Prof. Ineke Hans

Fach: Dr. Daniel Irrgang

Extern: Prof. Lukas Feireiss

MA EXPOSÉ

Von 'Transfloralismus'
und artenübergreifenden



n Design



MA Exposé

Von 'Transfloralismus' und Arten übergreifendem Design

Einleitung

In meiner Masterarbeit untersuche ich spekulativ wie ein soziales Kommunikationsnetzwerk für Bäume in Städten gestaltet werden kann. Ein holistischer Designansatz, in dem natürliche und künstliche, menschliche und nichtmenschliche Akteure miteinbezogen werden, setzt dabei die Basis für ein Projekt, das im stark anthropozentrisch geprägten Ökosystem Stadt die Bedürfnisse und Potentiale nichtmenschlicher Spezies berücksichtigt.

Inspiziert von verschiedenen post anthropozentrischen Ansätzen, steht das Bewusstsein für die Interdependenz und die bewusste Auflösung des Dualismus von Natur und Kultur im Fokus.

Problemstellung

Bäume in Städten sind im Anthropozän starken Stressfaktoren ausgesetzt: Platzmangel, Schadstoffe, verdichteter Boden, Schatten, städtische Hitze- und Trockenperioden.

Funktionale und technische Anforderungen der Menschen werden in der Stadtplanung strukturell vor die Bedürfnisse der Bäume gestellt. Während Waldbäume über ihre Wurzeln und Mykorrhiza Pilze kommunizieren (auch 'Wood Wide Web' genannt)¹ und in einem sozialen Interspezies Gefüge auf höchst intelligente Art und Weise für das gemeinschaftliche (Über-)Leben kooperieren, sterben immer mehr Stadtbäume als Folge unserer anthropozentrischen Integration und Haltung

Von Transfloralismus und Artenübergreifendem Design

Problemstellung

im urbanen Raum als auch der individualistischen Sicht auf den Baum als Einsiedler. Dabei sind vor allem gesunde Stadtbäume im kollektiven Kampf gegen die Klimakrise essentiell notwendig: Sie kühlen als natürliche Klimaanlage unsere schwülen Asphalt- und Betonlandschaften, sie reinigen und produzieren unsere Luft als 'grüne Lunge' der Stadt, sie tragen positiv zu unserer psychischen Gesundheit bei und sind Lebensraum für andere Lebewesen, die wiederum in zahllosen anderen Teilen unseres städtischen Ökosystems ihren Dienst leisten.²

Arbeitshypothese

Für ein baumgerechtes Leben in der Stadt, müssen wir Bäume als 'Social Player' ernst nehmen und ihnen ein soziales Kommunikationsnetzwerk ermöglichen, das ihnen erlaubt ihre Bedürfnisse und ihren Zustand zu kommunizieren.

Dabei ist zu beachten, dass das Ökosystem Stadt im Gegensatz zum Wald von der Technosphäre³ dominiert wird und es neben natürlichen menschlichen und nichtmenschlichen Akteuren auch künstliche und 'tote' Akteure umfasst, die in der Gestaltung eines sozialen Kommunikationsnetzwerks als Kooperationspartner der Bäume in Frage kommen. Mit diesem Gedankenschritt geht ein grundlegendes Umdenken des romantischen Naturbegriffs einher. Die über Jahre verankerte ideelle Distanz von Natur und Kultur⁴ soll aufgelöst werden und der stetige Ausbau der Technosphäre soll die Biosphäre nicht mehr überlagern, sondern sich mit ihr verweben.

In meiner Theoriearbeit möchte ich einen Diskurs zur urbanen Natur der Zukunft erarbeiten und die Interaktion von Natur, Mensch und Technik, beziehungsweise die Beziehung von Natürlichem und Künstlichem im urbanen Raum untersuchen.

Dazu werde ich, folgende Referenzen aus dem Bereich des klassischen Natur-Kultur Dualismus näher betrachten:

Andreas Weber, der in seinem Buch 'Indigenalität' über eine 'existentielle Verbundenheit mit der Natur' spricht⁵; Graham Harmans 'Object-Oriented Ontology', die entgegen des Anthropozentrismus die Privilegierung der menschlichen Existenz gegenüber der Existenz

nicht-menschlicher Objekte ablehnt und vertritt, dass alles gleichermaßen existiert⁶; Nicolas Bourriaud über das Ende der Distanzen verschiedener Sphären bis zur Zerstörung der Distanzen durch Technologie⁷; Timothy

Morton über Ökokritik und ein neues Naturverständnis mit 'Ökologie ohne Natur'⁸; Bruno Latour mit

verschiedenen Ansätzen zum Terrestrischen als Akteur und seiner Argumentation im Subjekt- Objekt Dualismus, die Rechte, die Autonomie und die Handlungsfähigkeit des Objekts anzuerkennen; Donna Harraways

Diskussionen zur Koexistenz und zum Zusammenleben aller Arten und Lebewesen und wie die Grenzen zwischen den Arten überwunden werden müssen.

Gleichzeitig möchte ich die wachsende Theorie des Transhumanismus integrieren, die im Hinblick auf den post humanistischen und post anthropozentrischen Diskurs als regressiv und höchst anthropozentrisch

Von Transfloralismus und Artenübergreifendem Design

gedeutet werden kann.⁹ Auch erwähnenswert ist Ray Kurzweil, der den beschleunigten techno-kulturellen Wandel nicht nur als eine systematische Notwendigkeit sieht, sondern die Entwicklung der menschlichen Kultur und Technologie auch so beschreibt, als wären sie derselbe Prozess wie die biologische Evolution - oder tatsächlich ihre logische Fortsetzung.¹⁰

Im Hinblick auf mein Vorhaben, ein Kommunikationssystem für Stadtbäume zu erarbeiten, ist interessant in Betracht zu ziehen, inwiefern sich die Natur mit technologischen Entwicklungen verweben kann und Bäume Nutzen für ihr Wohlergehen und ihrer Entwicklung aus ihnen ziehen können. Der Gedanke, transhumanistische Ansätze auf Pflanzen zu übertragen formt den aktuellen Arbeitstitel 'Transfloralismus'.

Die Forschung von Dr. Nadina Galle zum 'Wood Wide Web'¹¹ fungiert als Hauptreferenz zur Kommunikation von Waldbäumen über Mykorrhiza Pilze und ist gleichzeitig meine Inspiration zum Projektvorhaben.

Weiterführend kann die Ethik der Fürsorge eingebunden werden, um Strategien für den Umgang mit den genannten Themen im Kontext der Koexistenz verschiedener Akteure zu entwickeln.

Das Paradox von menschlichem Eingriff und dem Ansatz eines post

anthropozentrischen Gedanken, das sich automatisch entwickeln wird, erscheint mir als essentiell zu behandeln. Inwiefern kann die vom Menschen ausgehende- und der Natur 'aufgezwungenen'

Theorie

Durchmischung von Techno- und Biosphäre noch als solidarisch gegenüber anderen Spezies gelten, wenn der Mensch die scheinbare Hilfsbereitschaft erst entwickelt, nachdem er selbst Schaden davon trägt? Besteht die Bereitschaft zur artenübergreifenden gleichberechtigten Koexistenz am Ende doch nicht nur zum Wohl der eigenen Spezies?

Begleitend zur Theorie sollen bestehende Projekte zu den genannten Themen referenziert werden.

Praxis

Vorwegzunehmen ist, dass die praktische Arbeit von weiteren Analysen rund um die Beschaffenheit, Integration, Stressfaktoren, Bedürfnisse und Potentiale der Stadtbäume begleitet wird.

Wie in der Einleitung genannt, soll eine holistische Designmethode angewendet werden, in der an die Prinzipien derer Methoden angeknüpft wird, die das human-centered Design in eine arten-übergreifende Praxis weiterentwickeln. Allerdings möchte ich hier vor allem das Künstliche als Akteur betonen.

Für den Moment, nimmt das Projekt für mich noch verschiedene Dimensionen und Ausrichtungen an. Der urbane Kontext und die dezentrale Verteilung von Anlagenbäumen verleitet zu einem infrastrukturellen System oder zu einem urbanen Artefakt, das flächendeckend intervenieren kann. Generell kann das angestrebte Projekt als ein Service Design für den Baum verstanden werden, das mit einer Interspezies Interaktion spielt und eine Kommunikation ermöglicht.

Von Transfloralismus und Artenübergreifendem Design

Da ich mich in meinen Analysen an der Stadt Berlin orientiere, liegt es nahe, das Konzept in Berlin zu lokalisieren. Auch wenn ein spekulativer Charakter wahrscheinlich ist, sollen Möglichkeiten zur Umsetzung, Integration und Finanzierung weitestgehend skizziert werden.

Wegen der Interdisziplinarität, die die Projekt Thematik mit sich bringt, möchte ich je nach Projektentwicklung Kontakte zur Biologie, IT, Umwelttechnik, Baumpflege, dem Senat Berlin, Landschafts- und Stadtplanung, sowie Unternehmen zu Sensortechniken aufnehmen (s. mögliche Kontakte).

Betreuende Personen werden Prof. Ineke Hans, Prof. Gesche Joost und Prof. Lukas Feireiss sein. Das Projekt wird im Schwerpunkt 'Design and Social Context' von Prof. Ineke Hans stattfinden.

