

### **DIPLOMARBEIT**

### You are the Gardener **Return to Paradise**

ausgeführt zum Zwecke der Erlangung des akademischen Grades eines Diplom-Ingenieurs / Diplom-Ingenieurin unter der Leitung

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Dedicated to all by respiratory diseases exhausted humans who have lost their last breath in the battle for life.

I wish humans could be more like plants - capable of returning, of coming back to life once they have passed through the rough season.

## abstract

english

My master's thesis focuses on exploring the symbiotic relationships between non-humans and their environments, with a particular focus on garden theory and its context. Approaching the topic by specifically looking at the minute scale of planting, growing, and harvesting living biomaterials, in the next step I broaden my focus to the more general subject of the cosmic orientation and relationship between the Sun and our planet Earth. My motivation for this research stems from a desire to address the destructive processes of war and air pollution from refinery, and to understand how gardens can offer protection for all forms of life. Building on Gilles Clément's idea of gardens as protection for the best, I aim to create a meeting place that brings together humans, nature, and their dreams. To achieve this, I have developed a script in 2nd person Sq that guides the

player through four different gardens, each within its respective area. Using Unity, I have constructed non-colonial digital game environments that inhabit architectural and landscape artefacts, with no intention of seeking profit. The immersive quality of the digital game enriches the information content and allows users to remain in a dream-like state that embraces both their real world and illusions.

The project challenges the role of architecture in the wilderness and sees it as an instrument for fiction rather than a tool. It serves as an open stage for gameplay, an image, visual novel, and landscape utopia. Within contemporary conditions of second nature situated on anthropogenic sites of human ruins, new speculative post-anthropogenic and conceptual terrains of hybrid sumbiofilm emerge, raising questions of agency and intelligence of deep ecological consciousness of our environment. The focus is on the Jelas Polje, a natural area in Croatia that was used for recreation, hunting, and fish farming before the war in the 90s. The study examines soil, air, and water bodies' environmental phenomena and their interspecies relations in the service of sustaining life. It also opens up new possibilities for conceiving the world and the universe as a unity, where different species coexist and depend on each other in symbiotic relationships. The garden story leads visitors gradually through four different environments or biotopes, corresponding to the theory of non-humans: roots, leaves and flowers, as well as pheasants, white-tailed eagles, and cranes. The project proposes new speculative multispecies landscapes that promote co-existence and habitat between non-humans and humans, nature and technology. This is achieved through a shift in the relationships between visibility-invisibility, enclosed-planetary, and aerial-terrestrial.

In the end, the thesis presents a novel approach to the design of gardens that foster the co-existence of different species and replant the stage of connection between two worlds, natural and artificial ones. By exploring the relationships between soil, air, and water bodies and the non-humans that inhabit them, the project aims to promote deep ecological consciousness and foster sustainable ways of living that acknowledge the interconnectedness of all forms of life.

### abstract

deutsch

Meine Diplomarbeit konzentriert sich darauf, die symbiotischen Beziehungen zwischen non-humans und ihrer Umwelt zu erforschen, insbesondere im Kontext der Garten-Theorie. Um mich dem Thema anzunähern, betrachte ich es im ersten Schritt aus dem Blickwinkel des winzigen Maßstabs des Einpflanzens, Wachsens und Erntens von lebenden Biomaterialien. In einem nächsten Schritt erweitere ich meinen Fokus auf die allgemeinere Thematik der kosmischen Orientierung und Beziehung zwischen der Sonne und unserem Planeten Erde. Meine Auseinandersetzung besteht darin, entgegen unaufhaltbarer zerstörerischer Prozesse von Krieg und Luftverschmutzung durch Raffinerie, das von mir ausgewählte Gebiet als Garten zu verstehen, der nach Gilles Clément Schutz von dem Besten bietet, darunter Schutz von Leben und Träumen. Ausgehend von einem Drehbuch, das in 2. Person Sg durch vier Gärten innerhalb des Gebiets führt, konstruiere ich in Folge ein digitales Spiel in Unity, das nicht nach Gewinn trachtet. Experimenteller Modellbau mit Biomaterialien hat zur Entwicklung von architektonischen und Landschaftsartefakten geführt, die innerhalb der Gärten koexistieren. Durch seine immersive Qualität reichert es den zu transportierenden Informationsgehalt an und ermöglicht das Verharren im Traum. der seine reale Welt mitträgt, sich aber den Illusionen gegenüber nicht verschließt, sondern sich ihnen hingibt.

Das Projekt fordert die Rolle der Architektur in freier Natur heraus und betrachtet sie eher als ein Instrument für Fiktion und nicht als Werkzeug. Gleichzeitig ist es eine offene Bühne für Gameplay, Bild, visuellen Roman und Landschaftsutopie. Innerhalb zeitgenössischer Bedingungen der zweiten Natur, die sich auf anthropogenen Stätten menschlicher Ruinen befinden, entstehen neue spekulative post-anthropogene und konzeptuelle Terrains hybrider Sumbiofilme, die Fragen nach dem Wirken und der Intelligenz des tiefen ökologischen Bewusstseins unserer Umwelt aufwerfen. Der Fokus liegt auf dem Jelas Polje, einem Naturgebiet in Kroatien, das vor dem Krieg in den 90er Jahren für Erholung, Jagd und Fischzucht genutzt wurde. Das Projekt untersucht Umweltphänomene von Boden, Luft und Wasser und deren interspezifische Beziehungen im Dienste des Lebenserhalts. Es eröffnet auch neue Möglichkeiten, die Welt und das Universum als Einheit zu betrachten, in der verschiedene Arten in symbiotischen Beziehungen nebeneinander existieren und voneinander abhängen. Die Garten-Geschichte führt Besucher allmählich durch vier verschiedene Umgebungen oder Biotope, die der Theorie der non-humans entsprechen: Wurzeln, Blätter und Blumen sowie Fasane, Weißschwanzadler und Kraniche. Das Projekt schlägt neue spekulative Multispezies-Landschaften vor, die das Zusammenleben und den Lebensraum zwischen non-humans und Menschen, Natur und Technologie fördern. Dies wird durch eine Verschiebung der Beziehungen zwischen Sichtbarkeit-Unsichtbarkeit, umschlossen-planetarisch und lufterdgebunden erreicht.

Am Ende präsentiert die Arbeit eine neuartige Herangehensweise an das Design von Gärten, die das Zusammenleben verschiedener Arten fördern und die Bühne für die Verbindung zwischen zwei Welten, der natürlichen und der künstlichen, neu bepflanzen. Durch die Erforschung der Beziehungen zwischen Boden, Luft und Gewässern und den non-humans, die sie bewohnen, zielt das Projekt darauf ab, ein tiefes ökologisches Bewusstsein zu fördern und nachhaltige Lebensweisen zu unterstützen, die die Verbundenheit aller Lebensformen anerkennen.

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replanting the project

## within a conception of garden

The garden as an active verb, as the process of activity in space and time-of cultivating, spreading, arranging, caring, but also preparing a person for burial after death. The garden can be seen in its complexity as a symbol of the colonial past, authority and power. Still, it can also be seen as a reflection of the macrocosm in the microcosm, a place of different sensual and spiritual experiences and healing potential. The Zona is an experimental replanted unit, a symbiotic organism without material borders—there are no walls, no buildings, only the architectural artefacts in the open landscape rooms—that consists of energetic potential expanding towards the city fabric. Through its cosmic orientation, the garden gives us a sense of direction. It allows us the experience of being on this earth, in the space of universal mixture (pan en panti), and in our celestial position in relation to the Sun- the mechanism of transformation, circulation and maintenance of the cosmic energy in the ecosystem of our biosphere. The fundamental elements of life (water, air and soil) are the model upon which the new speculative postanthropogenic landscape of the symbiocene emerges and balances the symbiotic interspecies relations that sustain life.



The archetype of the garden is, fundamentally, a contained territory for growing plants. The very origin of gardening-sowing, planting, fixing, placing and maintainingoccurs when a wall is built around an orchard. The landscape is isolated and eliminated within the walls of the medieval hortus conclusus, which offer protection from the frightening wilderness of the outside world. In the limited dimensions of the scale of the 'room', the invisibility of the outside world is stressed by the visible presence of the endless sky. This physical separation of a particular space from 'space in general' prepares what once was a cultivation ground for its conversion into a space of delight. During the Middle Ages, three types of the enclosed garden were developed, distinguished by their form and programme. In the castles (the garden of pleasure), in the cities (the garden of arrangement and classification of plant species)

- the Zona became a model for the new urban synergetic development of the post-anthropocene city and in the monasteries (the garden of reflection and medi-

tation). One of them, the hortus ludi-the garden as a social space for games and play-is defined as a place of pleasure and the scene for dining, dancing, bathing and music-making. The journey through the Zona brings sensual experi-

ence and awareness about the symbiotic relations, multi-species communities and their life-recreating(rerooting) force through the new digital means of communication between humans and non-humans. Nowadays. the garden unexpectedly connects with the prominent virtual space of digital infrastructure, such as contemporary video games, whose ludic mechanics can be seen as the conditions of possibility for each constructed world. The video games display disconnected worlds which primarily discard utility-replaced by quality in gardens. They can build/generate alternative environments or parallel worlds-world-making-governed by their own logic and autonomous rules. Nevertheless, the hortus ludi - as a garden of courtly life - symbolised not just the earthly beauty of women, reality of life and love. It also represented paradise as a place of sensual delectation.



Pairidaeza is a form of a garden of ancient Persian origin. The term is composed of 'pari' meaning 'around' and 'daeza' meaning 'built wall'. In the Persian desert, such gardens were enclosed places defined by a surrounding wall and divided by water channels into four smaller paradises. Pairidaeza is the cosmogram, a depiction of the cosmos- Greek kosmos 'order, the universe, the world' as well 'ornaments of a woman's dress, decoration'-landscape and the world, which is symbolically divided by four rivers into four continents, four elements, four colours, and temperaments. The earthly Paradise - the Garden of Eden - is the location of the mythical land of ideal climate, which marked the end of the world as the origin of the human condition. Both in the real sense, of the furthest possible physical territory, and in the temporal sense. The ideal environment for an abundance of food and the lack of need for objects made labour unnecessary, allowed co-existence without exploitation or dependence on other species, and did not require any physical modification of the given environment as a premise for survival: this mythical utopia, a fictional story and the first primordial version of Big Brother. The Lord [God] formed the first humans- 'humus' meaning earth or ground-out of 'the dust of the ground' and breathed into the first man's nostrils the breath, the logos of life, and shaped a woman from his rib. They seemed to live in harmony with each other, nature, and other non-humans. The first gardeners, Adam and Eve, perhaps not entirely voluntarily and under threat, were tasked to cherish the refuge of moral restraint and follow the rules that forbade access to knowledge. Eva's disobedience and her hunger for knowledge can be seen as the positive quality for active change - in that common interface of terrestrial life, the

airand breathability hovers over our future; therefore, cleaning it is a necessity.

The condition — if... then...of the game mechanics — performed by Eve's relationship with a non-human (the serpent) sent the humans to cultivate their own living environment in the oppressive heat of the desert, and to an endless search for the lost paradise.



Walking through the four gardens situated on the anthropogenic, second nature sites of human ruins and across the four different biotopes of gradually changing waterlogged anaerobic soil—alluvial forest, swamp and fishponds—the project challenges the role of architecture in the wilderness, replanting in the atmosphere the non-engine artefacts of the air purification. This might be the first step of liberation and deconstruction of an enclosure and the imaginary drawn borders extruded from the earth. One must replant the garden to change the second nature—the environment shaped by humans and other anthropogenic factors. The anthropogenic landscape has been shaped not only by human activity but also by many other species, as well as non-living matter-water, wind, air, and soilshowing that such environmental change and world-making per se is not limited to a few. The experimental quality of the garden requires the destabilisation and destruction of the geopolitical encoding of territorial borders, the obsession with the vertical accumulation of power and short-term gains, the hegemonic domination over the air, water and soil, fossil fuel based industry regimes, atmospheric pollution, the suffering of the multi-species and surveillance capitalism. The project opens a port towards planetary rethinking and understanding the world and the universe as an immersive symbiotic interspecies community.

It explores the environmental phenomenon of soil, air and water bodies and the unstoppable destructive processes of war and air pollution. It ponders upon the relation between the body and the ground, feet and terra firma, roots and the fungi, brain and the lungs, birds toes and the nocturnal roostescapes, migration and the air, establish the program and the multispecies landscapes of the project terrain.

Urging us to rethink what could be the third nature latent potential of landforms and their conditional speculation on the wildlife communities and how to redefine the relationship and consciousness of living with other humans and non-humans attuned to the planetary rhythms in the era of air, water, and soil corruption. In this highly stressed zone of geopolitical instability and geocentric logic, a radical shift in fos-



sil narratives of materiality is needed more than ever. This may occur with the future practices of reconnection with elemental sources of energy around the unlimited potential of the Sun-the Earth gets more solar energy in one hour than the entire world uses in a year-and the alternative modes of renewed symbiotic replanting, growing, harvesting and treating of biomaterials. An envisioned epoch of the post-anthropocene, the Symbiocene—the hybrid symbiofilm that navigates through the fundamental elements to create the shape of the future, free-border-non-colonial terrain- rearticulate our relationship with the cosmos, sun, air, water, soil, nonhumans and digital networks. In the end, the garden embraces both the landscape as an emotional perception and the environment as an objective scientific component, creating a limitless stage for dreams, pleasure, utopia, surprises, games, play and experimentation. Being at the same time the protective pool of invention of life and the washing machine of intermingling, it enacts the common encounter between humans and non-humans, nature and technology. The garden is a double-folded and non-binary playful instrument of fiction that unlocks its feminine, sensitive side in the name of remedial power. It emancipates the world from the current geopolitical control and the progressive deterioration of our environment thanks to the new mechanism of interplanetary and celestial queer ecology.

The non-human is the cause of the multiplicity of life forms not only in space but also in time and history.1

The human sphere-culture, history, the life of the mind is not autonomous, it has a foundation in what is not human the apparently non spiritual elements- air, water,...<sup>2</sup>

...soil

The Life of Plants, A Metaphysics of Mixture, Emanuele Coccia, 2019, Polity Press, UK, S. 63.

<sup>2</sup> Ibd., S. 62.

#### human

3.2%	65%	18.5%	9.5%
nitrogen	oxygen	carbon	hydrogen

#### sea water

47.5%	36 %	15.1%
nitrogen	oxygen	carbon
		dioxide

### atmosphere

/8%	21%	0.9%	0.1%
nitrogen	oxygen	argon	other
			gases

#### soil

79%	20.6%	0.2%
nitrogen	oxygen	carbon
		dioxide

# you are the gardner

storytelling

This summer ti<sup>1</sup> are finally turning ten. The long-awaited 1990 has eventually arrived. Ti are no longer a child, and ti give yourself the right to go alone for a walk after breakfast. Your sister is 13 years old and hasn't been hanging out with ti for a long time. She has her own company; they are out somewhere and not interested in ti at all. She no longer must look after ti, and this fact gives ti great pleasure. Ti take your bike, wear your summer sneakers, and walk away from the well-known street. Until now, ti always went there accompanied by your sister, but today ti have the freedom to go there alone. Anyway, ti know that path very well. Ti used to play with a friend right there in the trees. A vast field stretched out infront of ti. It is actually a cornfield. Behind it is a pasture, a small meadow, and a couple of trees, which ti call the Magic Forest. Under the shade of those treetops, ti feel protected. It is as if ti are under a veil of magic that protects ti from the sudden appearance of predators. They can't do anything to ti. This is where the game ends, and everything starts all over again: "Who ever climbs the tree first and stands on one leg is saved." Ti believe that somewhere high in the trees

1 ti is you in Croatian, the second person singular, the group leader

and on the north side, under the mosses and lichens, supernatural creatures, suchas angels, miracles, and fairies, exist side by side inhiding. They call Domaći or the Guardians of the Forest. *Ti* came here early this morning with the sole aim of discovering them. *Ti* know that they are hidden there and take care of every tree: if one tree gets sick, they will cure it in any case. And this time, *ti* will be able to experience it. Unfortunately, it doesn't workout for *ti*. They eluded *ti*.

Ti return home disappointed. Ti are dizzy from the sun and ti are looking for your best place on the balcony. This is the ideal place to continue your second favourite game: "Who will be the first one to extinguish the flame of the matchstick." The matchstick is the tower of the refinery, which is situated on the other side of the river Sava and, viewed from your balcony, looks like an upright lit match in which brightly red flame is the combustion of gas. If ti get lucky and the wind blows in the right direction, especially in the evening, ti get the impression of blowing it out with the air. But in vain, the match has never been extinguished in this game.

To blow is to make the world, to fuse with it and to redesign our form, in a perpetual exercise.

Ti miss that childish interactive match-extinguishing game while standing on your balcony and staring at the horizon. The same trees are still there, and the supernatural creatures Domaći still take good care of them, only that the same river now divides the territory into two different parts: "our side" and "their side". According to the new rules, the gamestarts on "your side", while the match burns on "their side". Ti soon realises that the new regulations do not change the game's outcome much, regardless of the new sides order. Your sister keeps calling ti to come downstairs and show her your new student card. Ti are now twenty years old, and the time has come to leave your home slowly. Ti, remember that the war started not long after your tenth birthday. It not only extinguished your game with the trees and match stick but also strongly deteriorated your city, the local humans and non-humans, and its surroundings.

What used to be a large wetland area with affluences from the Sava River and its tributaries - located only ten kilometres away from the city centre - nowadays stands as a drained land with the construction of embankments and canals. Jelas Polje - the vast lowland territory between the Sava River and the Dilj Mountain - had one of the largest and richest carpponds, an area of about 25km2. During the last century, it was transformed into fishponds with extensive fish farming, an alluvial oak forest as a hunting area, and the leisure area with the Luna Park and the swimming facilities. Its prevailing habitat consists primarily of intensively cultivated arable fields, alluvial oak forests, wet grasslands, river and swamp habitats. Nobody goes there anymore. It stands abandoned like the ruins of human disturbance. Apart from a massive pile of garbage, there is nothing else to find in the area. Only some birds, maybe...and some plants.

Your sister tells ti a story about how you went to Luna Park together when ti were very young, and ti certainly don't remember anything except for the huge mechanical ballerina and her luminous dress. She was colossal. And yellow. That's all ti can now recall. The sister continues with the story of how your grandfather hunted in that oak forest with a group of Italians, where pheasant hunting used to be a real attraction.



He was the hunting leader, and everyone trusted him. Afterall, he knew how to cook the best pheasant soup. Ti have never met the hunting leader. The same year ti were born, he left with the birds and never came back, although many of them return every year at the same time to the exact same spot in the field of Jelas Polje.

Nearly 7000 birds of light, will arrive at their wintering stop-over site in November. Ti, check your watch. Today is 19 September 2000, which means, just a week ago, they left the north of Estonia, its summer breeding residence. They are already on their Baltic-Hungarian flyway travelling60km/h to the south in the largeV-shape flocks over Hungary. More precisely, they are now in Debrecen, and after so many days of flying, they need to rest and refuel free from human disturbance. The cranes -bringers of light, long life and wisdom-were the messengers of the gods, and people believed when you would see a crane you would be healed and happy for the rest of your life. Cranes are one of the oldest groups of birds, which charisma lies in their beauty, dramatic calls, and dance. They live long in monogamy and are very sociable during the irmigration. At the beginning of April, the first flocks of cranes arrive in Estonia and celebrate the end of a long journey. On the vast fresh marshes, they begin courtship rituals, a spectacular but noisy affair dance, in which they form a new partnership. The newly established pairs duet together for several minutes celebrating their lifelong bond. The old pairs return to the last year's nesting area and re-establish their territory. They complete their nest on the ground in just a few hours. The new task of incubating generally two eggs and caring for their young is shared by both partners. The warm rising air in September is the sign for cranes to gain their lift without flapping the wings and form into a broad V shape turning to the south. Adults guide and protect their young throughout the journey. After a month of travelling in large flocks, they arrive in Jelas Polje on the first day of winter. They split into smaller groups and families to spend the next three months. For their broad lifestyle: resting, foraging, dancing, and trumpeting, they need abundant liquid on the ground. The crane's foot has only three toes, unusual for the bird's anatomy. Reducing its hallux to a dewclaw they lost the ability to perch on branches, but it brought them efficiency while walking on the



ground. Moreover, the cranes sleep at night in shallow waters of the carp fishponds. This nocturnal communal activity, the roosting of cranes, serves as an information centre, reducing predation risk. While they sleep standing on one leg in the water, they can detect right through their legs - as antennae -the noise and vibrations of nocturnal predators. If the raptors try to sneak up on a sleeping bird, the cranes will immediately give a warning call. But the most dangerous predator today, besides the human hunter, is climate change. Cranes are wetland-dependent birds, and the habitat is a limiting factor. They suffered for years from environmental changes and other issues such as gas, oil, and air pollution. The call of the crane today should ring out a more urgent message alerting us to the plight of our vanishing wetlands and wild places as irreversible changes that affect the whole of Europe.

The birds are a link between heaven and earth, dreams and pain. Ti know that more than 150 species of them habitat there, very close to ti, but ti have never been there. Ti must study now. And ti won't do it because ti have better things to do. The supernatural creatures will take care of them anyway.

"When a bird ceases to love another bird, it doesn't tell it: ,Fly away now, thousand miles away, so that you wouldn't see how the indifference is building up in the pupils of my eyes! Because the bird is not as listless as a man; for a bird distance is merely hovering of sweet light that inflames the love. The bird doesn't tell to another bird: Now hide a thousand miles deep under the earth so that you don't hear how I sing at sunset a tender lullaby to another sweetheart that lies with its beak in my lap!' Because the bird is not as superficial as a man, it knows that heartbeats under the earth are heard even stronger and instead of the calming sounds of a lullaby the entire forest would be forced to hear the roaring of the underground caused by the pain. For that reason when a bird ceases to love another bird, it stays by its side to die there in solitude. But a human when it ceases to love another human, in shame and confusion doesn't know what to do, ends up running as far away from the other, and nesting forever his sorrow in one's heart. There are no such things as small pains. People love small pains.

They are pretty and don't hurt a lot.

"Kad ptica prestane voljeti drugu pticu, ona joj ne kaže: "Odleti sada tisuću milja daleko, da ne bi gledala kako se gomila ravnodušnost u mojim zjenicama!" Jer ptica nije troma kao čovjek; daljina je za nju lepršanje slatke svjetlosti koja raspiruje ljubav. Ne kaže joj: "Sada se sakrij tisuću stopa duboko ispod zemlje, da ne čuješ kako pjevam u predvečerje nježnu uspavanku drugoj dragani, koja leži s kljunom u mome krilu!" Jer ptica nije površna kao čovjek; ona zna da se otkucaji srca pod zemljom propinju još snažnije, i umjesto umirujućih zvukova uspavanke cijela bi šuma morala slušati tutnjavu podzemlja koju je izbacila bol. Zato kad ptica prestane voljeti drugu pticu, ostane pokraj nje da tu umre, u samoći. A čovjek kad prestane voljeti drugog čovjeka, od stida i pomutnje ne zna što bi i, bježeći sve to dalje od njega, ugnijezdi zauvijek u svome srcu njegovu tugu. Nema malih boli. Ljudi vole male boli. One su lijepe, a ne bole mnogo.

> Kad ptica prestane voljeti: Izbor iz posljednjih rukopisnih memoara Vesne Parun, Vesna Parun, 2022, Hrvatski drzvni arhiv. Zagreb.

25

It's October, and while ti are waiting for a lecture and surfing the internet, ti suddenly find the breaking news headlines: "Explosion in the Brod refinery", on 9 October 2018 at 21:30, the refinery plant 05-120, where an unknown source destroyed Max. One person died, and over ten people were injured...

The accident happened close to your city, with easy access to the Sava River, which is navigable from Sisak to Belgrade and further to the Black Sea. Due to its good geographical position, it was a logical choice for constructing the Oil Refinery. The refinery was founded in 1892 by the Hungarian chemical industry company Danica. The capacity of the factory was 25,000 tonnes per year. After the Second World War, it was restored and nationalised. New plants with higher processing capacity were built with a tendency to increase secondary processing. The line "Snam Progetti", or so-called the old line, with a total of 2,000,000t/y was completed in 1968, and in 1990, thenew line with the capacity to process 3,000,000 tonnes of oil per year was additionally built. Ambitious development plans for the Brod Oil Refinery were interrupted in 1991 with the beginning of the war...

Ti call your sister, and she explains to ti how a colossal flame was burning across the river last night. Observing from your balcony, it was like a hundred matches lighting at once. Everything smelled terrible, and it has been stinking for years since the refinery was improperly put back into operation. Shrouded in secrecy, in February 2007, the Oil refinery was sold to a Russian company owned mainly by the Russian state company Zarubezhneft. The rest of the ownership is equally divided among the other three legal entities; probably people from the Balkans are behind it. Unfortunately, most of the contractual obligations were never fulfilled, and the new owner did not take any care of the air filters. Thus, the air in the whole region has been severely polluted with PM particles for years. Especially with PM2.5, which can get deep into your lungs, and some may even get into your bloodstream, posing the greatest health risk. The mortality from respiratory diseases has increased sharply. Your city has one of the highest rates of respiratory illness in the whole country, high mortality during the winter months and associated mental health issues due to this situation. Many

epidemiological studies have shown that the daily mortality, mainly from respiratory diseases, follows the daily fluctuation of air pollution.

Although the ecologists have persistently protested the refinery operation for the last few years, nobody cares about it. Investors have focused on short-term gains, do not care, and no one else has been able to stop them. The refinery was operating improperly until the accident occurred, and apparently, it will soon continue after the clean-up.

Ti feel shocked and disappointed.

2022 has already exhausted ti enough. After spending two years under the masks in the forced fear of the pandemic, accusing the air and its fluidity of being a medium for the spread of disease, and reducing your private and public life to the scale of your own room and zoom-meetings, ti still can't see the end of your future problems. Ti again have that old fear from your childhood, when ti were just ten years old, and when the war was a general issue constantly discussed. But now ti are much older, and ti no longer believe in the stories about supernatural creatures who heal and care for every tree and plant on our planet. The same story and the same games are repeated, only now on the other side of Europe.

Ti already know that those "creatures" are the "edaphon", the soil biota, its flora and fauna, bacteria, fungi, algae, and lichens. The life in the soil has somewhat remained "the deep ocean of the land". It congregates in hotspots around the roots in the topsoil. The body of soil, the most complex biomaterial and the living mantle of the earth, comprises a mixture of gases in its pores, minerals, particles, liquids, and organic life, which constantly breathes in and out. Like the breathing mechanism, the soil air (N, O2, CO2) is in constant exchange with the atmosphere. Plant roots and micro-organisms require O2 for their metabolism, and as a waste product, they produce CO2. Globally, soils are the largest terrestrial carbon pools. They can take up and release gases depending on microbial communities and the underlying environmental conditions. Within recent times soil respiration has accelerated through the land-use change, and agriculture exhales a large amount of important greenhouse gases. As a product of space and time, the soil is the 3D archive of our natural and cultural history. It can remember, it has memories. Its memory can reach back thousands of years, showing the traces and scars that biological processes and human activities have left behind. Ti can still recall that 6% of the earth's surface is wetland, areas with low elevation and high-water tables. This means that 800 million hectares on our planet, including Jelas Polje, is "hydric soil" with anaerobic conditions in the upper part of its profile. The pore volume is occupied mainly by water, and the oxygen consump-



tion by soil biota exceeds the diffusion of O2 into the soil profile. The microbial assemblages adapted to an anaerobic environment regulate numerous essential biogeochemical cycles, such as carbon, nitrogen, and sulphur. With a lot of help from high school chemistry, Ti finally understood that the grey colour of the soil in Jelas Polje is a product of iron reduction. Important decomposition processes produce bioavailable nitrogen and phosphorus, which support the productivity of plants, especially the presence of hydrophytic vegetation. The plants can absorb nitrogen, the crucial part of the green pigment chlorophyll, only from soil, but not the free gas from the air.

Ti are indescribably fascinated by how important the forgotten ecosystem, the soil web, is today. The fungi grow through the soil, picking up nutrients and water and returning them to the plant, trading them for photosynthetic carbon. The entire surface area is a conscious membrane, below which the intelligent natural internet of interfacing mycelial networks connect the plants and create the "WoodWideWeb". Ti realise that the plants are not individuals. Infact, they interact with each other and, through this neurological network with the mycelium and its cellular intelligence, they help each other to survive. The role of all forms in nature is the symbiotic relationship, "sumbios"or "living together" - from the micro to macro level, the co-existence between the species for mutual benefit. The bodies of most organisms are multi-species landscapes; no one can exist without the assistance of other species. Even your body is in an inter-species relationship with a million bacteria. We, humans. are colonised by fungi, bacteria, and viruses, just as we colonise our rooms, buildings, cities, and planet. You are deeply part of nature, a community not separated from this planet. There is communication betweenthe organisms and languages betweenthem; if you destroy them, you will destroy yourself.

Ti find out that the species will likely begin colonising human ruins by developing new species assemblages. From now on, ti will have to add a superior state of awareness, defined not only by the interaction of living beings but also by their cultural system. Ti want to find compensation for the decrease in material possessions, something immaterial



that would be highly valuable to a society. The redefining of the biotic substrata: water, air, and soil, which form part of the new objectives of immaterial values compatible with new ways of living.

All ti need to do is a slight shift from an enclosed garden to the planetary garden, from the second nature to the third nature, and from the anthropocene to the Symbiocene.

The living: the sum of all those beings capable of transformation, from bacteria to man, bound together in a knot of relationships, whether tight or loose, linking each part to the whole in a constantly self-renewing dynamic.4



4

A tree's most important means of staying connected to other trees is a "wood wide web" of soil fungi that connects vegetation in an intimate network that allows the sharing of enormous amount of information and goods.5

The web is so dense that there can be hundreds of kilometers of mycelium under a single footstep. And not only that, the mycelium connects different individuals in the forest, individuals not only of the same species but between species...6

The biggest, darkest nodes are the busiest nodes. We call those hub trees, or more fondly, mother trees, because it turns out that those hub trees nurture their young. ... Mother tree colonize their kin with bigger mycorrhizal networks. They send them more carbon below ground. They even reduce their own root competition to make elbow room for their kids. When mother trees are injured or dying, they also send messages of wisdom on to the next generation of seedlings.7

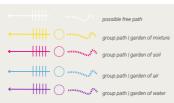
- 5 On the necessity of gardening: an ABC of art, botany and cultivation, Laurie Cluitmans/Barnas, Maria/Bruce, Jonny /Heilbron, Thiëmo/Helmus, Liesbeth M./Jong, Erik de/Kam. René de/Katsof, Alhena/Kincaid, Jamaica/Rutten, Bart/ Sandilands, Catriona/Vries, Patricia de, 2021, Valiz, Amsterdam, S. 176.
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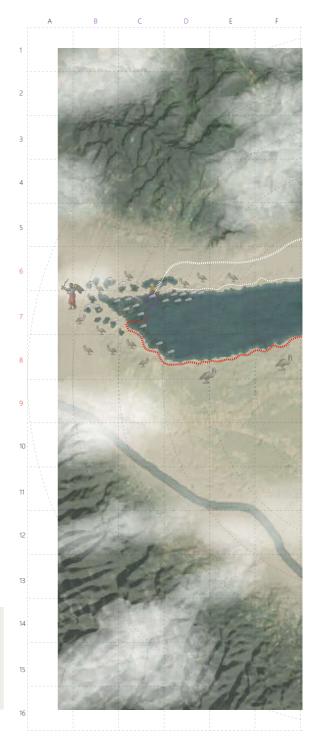
Ti quickly collect the bluish transparent helmets and checks the list with the names of the visitors. Today, on 21 November 2052, at 10 am, ti have only five humans for a tour in the Symbiozone. Ti will need five special digital devices, one for each visitor, which, connected to the human skin, can detect any symbiotic relationship and establish communication between humans and non-humans. Ti work proudly as the only guide allowed to take the visitors through the four Gardens of the Zone. Ti know there are strict rules for the application and passing through the Zone and that no one can visit the Gardens without your assistance. The Sumbiozone consists of four other Zones, four different Gardens. No human is allowed to enter the fourth Garden, not even ti. It is an energetic fluid space where birds live freely without human interference. It can only be observed from a distance or visited through the eyes of a non-human. Whoever passes through all four Gardens once can be completely healed and enlightened. Maybe this is just another story, but something changes after the garden visit.

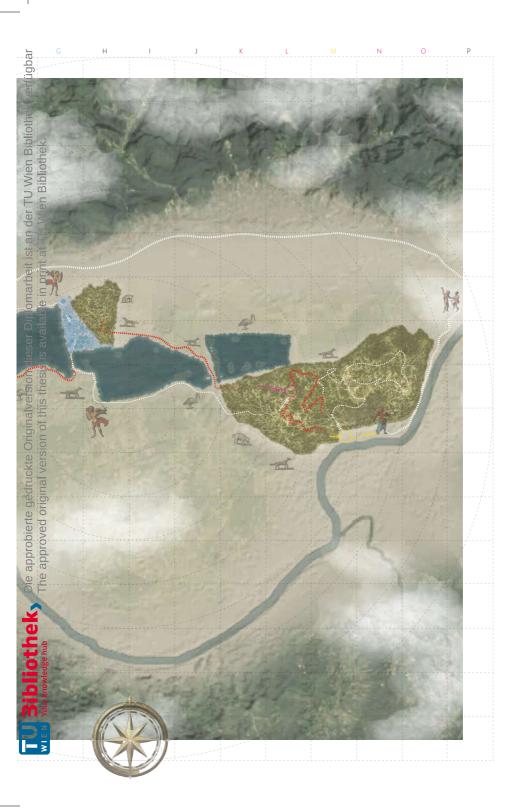
What used to be a protected area of Jelas Polje on the outskirts of your city has now gradually become a zone covered by a thin film of vitally organic microbiome substances. It is an experimental non-human symbiotic biounit. The biosphere consists of different biotopes and its multi-species relations ranging between the multilayers of the air, water and soil, leaves, flowers and roots. No humans live in the zone. They are just visitors and observers.

Paradise is a form of garden of ancient Persian origin. Such gardens were enclosed places. The term (in the ancient Median language paridaiza, and in the ancient Avestan language pairidaeza) is compounded of "pa'iri" or "pari" meaning "around", "circle", and "da'eza" or "diaza", meaning "built wall". Hence, a walled garden.8

> On the necessity of gardening: an ABC of art, botany and cultivation, Laurie Cluitmans/Barnas, Maria/Bruce, Jonny /Heilbron, Thiëmo/Helmus, Liesbeth M./Jong, Erik de/Kam, René de/Katsof, Alhena/Kincaid, Jamaica/Rutten, Bart/ Sandilands, Catriona/Vries, Patricia de, 2021, Valiz, Amsterdam, S. 43.







Nº 1 The Garden of Ludus / The Garden of Pleasure / The Garden of Mixture

The whole group is finally here. At the beginning of the route, ti first explain the rules and the story to them before entering-Garden №1. The Garden of Ludus! It used to be a gatheringplace, a leisure area with Luna Park, and a swimming poolnear the Oak Forest and the Sava river. Especially in summer, citizens visited this area in large numbers, spending the hot days in the pool, eating in a restaurant, playing sports, or having fun in the craziest devices of the most modern amusement park. It could easily be compared with Coney Island, only much smaller and with a clear undertone of Yugoslavian concrete utopian architecture. And the blue, that special one, can only be found here. After the war, it became an abandoned place for many years. The ruin of human disturbance, the site of various waste, a landfill of plastic, air, and soil pollution ... a place that certain types of plants began to occupy.

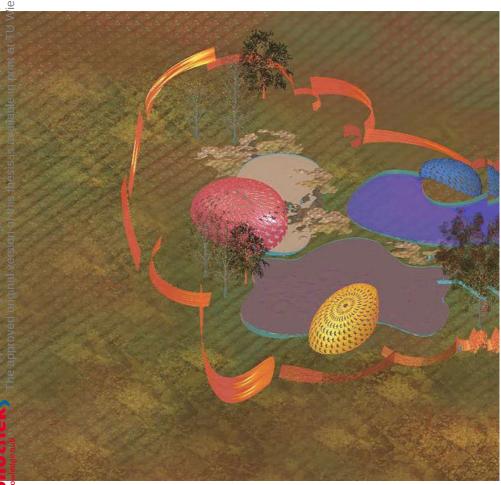
In front of the great depth of the forest wilderness, ti are the first one to set foot into the Garden. The group follows ti. Ti explain to them that this will be a cleaning route, a route of purity, a "pre-entrance" to the other gardens. So, vi9 don't need your special suits and helmets yet, and vi can leave them right at the entrance. Ti give a hand signal to the group, passing first through the Gate, the transparent portique that rose like a cobweb over the thin construction. A membrane curtain woven with a unique biomaterial pulls vi inside. The yellowish colour of the entrance is glistening through the rays of the sun penetrating behind vi. Your nostrils are instantly intoxicated with a sweet unknown smell of the membrane web. Inside this outdoor room in the open air, ti feel the safety and ease of the home, protected from the wilderness of the nearby forest and swamps. The protective stageset of the entire elliptical-shaped garden is enclosed by an outside permeable interactive "wall" that acquires and processes the data of each garden, passing flora and fauna from one habitat to another. If ti take a closer look, ti can notice that the wall is in constant interaction with visitors, non-humans and other gardens, displaying their continually changing data. The whole group is briefly mesmerised

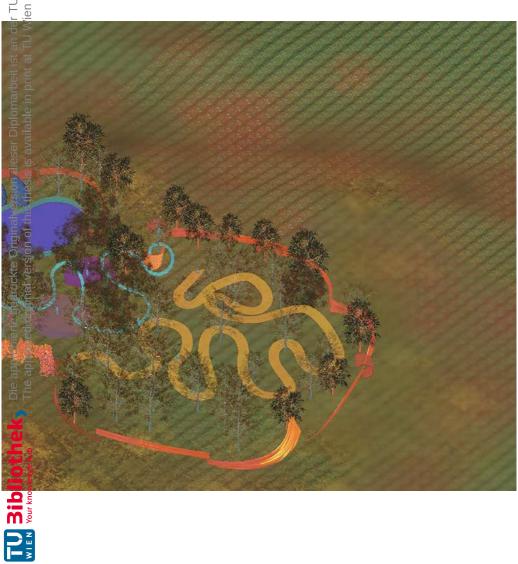
by the immersive character of the wall, staring at its crystalline surface. Ti, call attention to yourself, trying to explain the role of this organism and its information. There is no geometrical composition of its form. Instead, the visitors can decide freely by their position. Ti have the impression that this is almost an unreal barrier and that ti can pass your hand through it. On its display body, vi can see the current data of the air purity, the exchange of CO2 between the atmosphere and the pedosphere, all migration maps of birds with information on their current location, the composition of the soil and its active microflora, underground mycelial networks' activities...

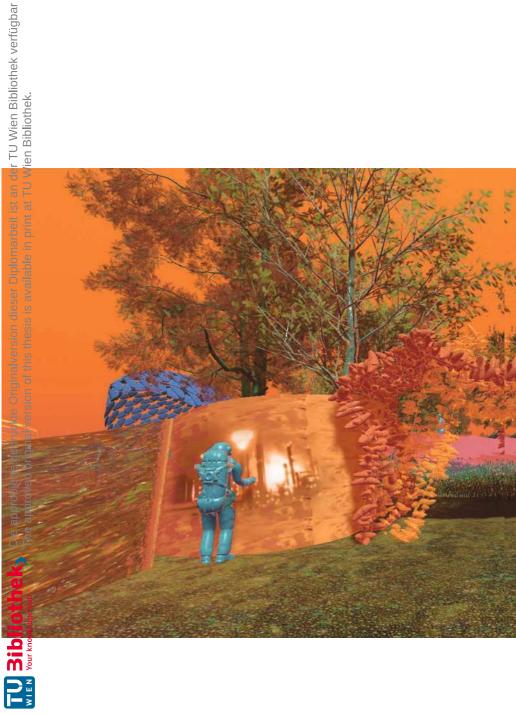
Moving away from the wall, the stage is left open in the garden's centre and divided into two sides, a shaded and a sunny place. Ti can feel how the trees occupy the right shaded part bringing a light breeze through its position. The mobile path extends under treetops like mycelial networks in the soil, creating unique niches for different play experiences. Ti follow the game's way through the entire shadowy area, a vital bioplayground, lifting off the ground as if ti were floating above the tall plants that occupied this area. One group member started the game on the path and disappeared behind the glittering plants. Ti have the feeling that his body has mergedwith th eviscose shimmering flowers and become a part of thegarden's biota. But luckily, he appears very quickly on the other sunny side, which becomes partially blurred in a mist of warm steam. The haze, which tastes most like ripe raspberries, was spreading from the water bodies to the bathing area. This is where vi can go through the purifying process, cleaning your body first. Most of it stands in the sun, while one part has merged with the membrane curtains, like the one at the entrance. Its construction partially took the form of a gallery, which is overgrown with various plants. It is like a space in-between, along the wall and the water surfaces, which is more enclosed than the garden itself. Ti approach the pool with warm water while the aromatic herbs bruise under your feet and spread their intense scent. It feels like a walk on a bio-carpet interwoven with the most diverse plants and their secretions. Slightly dazed, ti invite the group to join ti for a swim. Bathing together in a pool with warm water, which sparkles reflect the arch above it, is like a ritual that each group must go through. The vault membrane, which covers only one part of the pool, seems to ti like a huge transparent treetop. Ti find a comfortable sitting position in the pool to observe the arch above ti. It looks as if the membrane merges with the sky and becomes a part of the air from which the luminous layer of the information game gently emerges. It is a continuous performance between the terrestrial and astral bodies; the image of the cosmos flows into the image of the garden below, reflects on the water's surface, and returns to the sky again. For a moment, ti feel that all around ti is only the sky. Everything is the Sky, and ti are just a part of the celestial space of flux and of influences. The other two formless pools, each with a special water experience, also seem to be part of the sky setting.

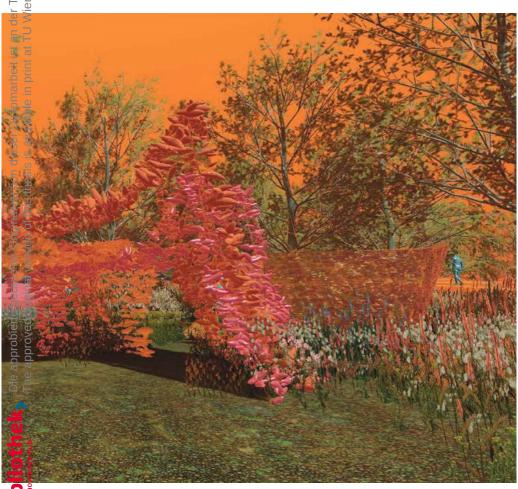
After the weightless aquatic pleasure, ti invite the group, who have experienced bodily purification, to head towards the bridge. The central and final part of the first garden leads to the exit. More precisely, towards the transformation into the next garden. The new bridge, built on the traces of the old one, spans over the canal at the edge of the forest. Its tubular body, which resembles the inside of the fungi, slowly invites vi to leave your place of mixture, spectacle, water, air, soil, everything in everything. Vi, take your suit and helmet and walk through the tube. Ti stop with the group momentarily to touch the gills-like layers that make up the bridge space. Like a thin white skin, perforated with light, it follows vi to the very end of the garden exit.

The Forest appears.

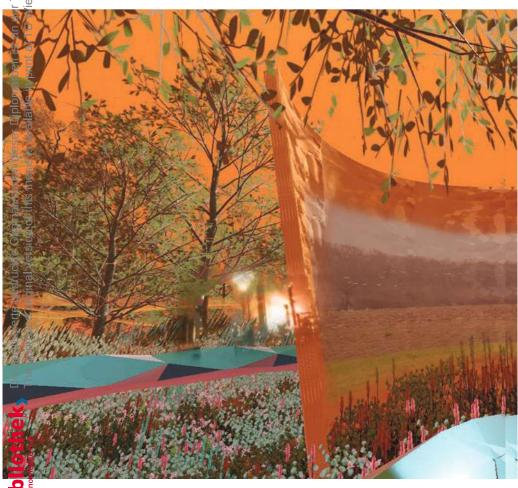




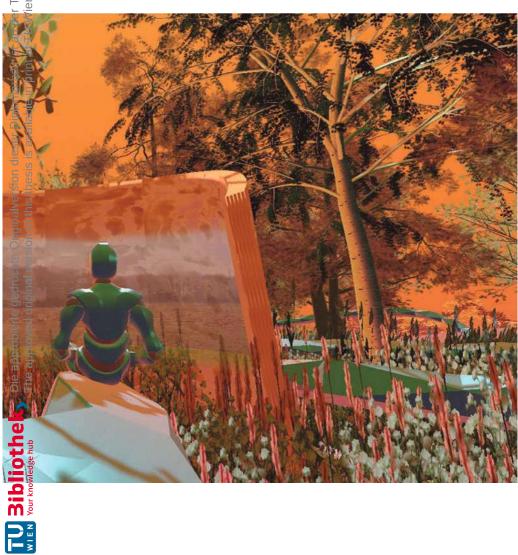


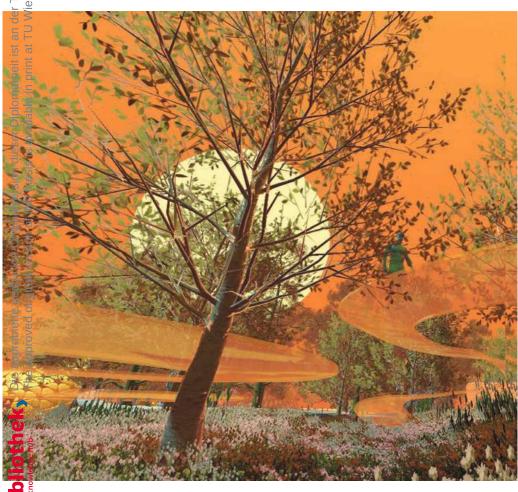




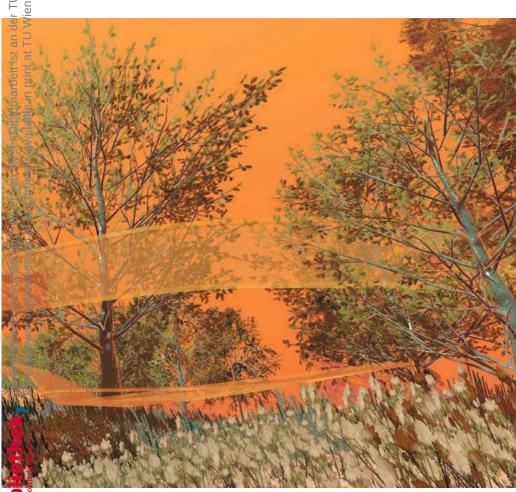




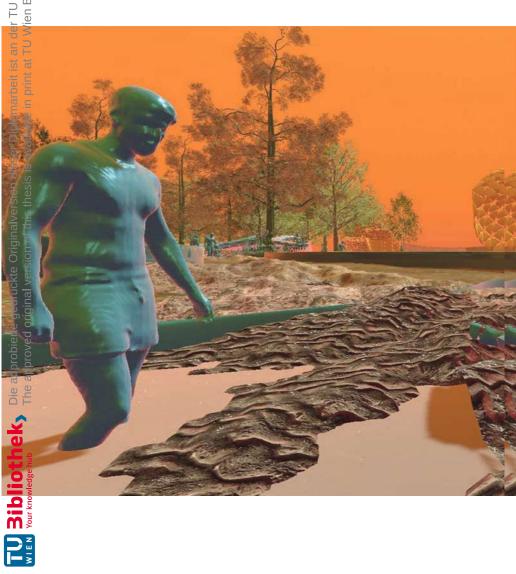


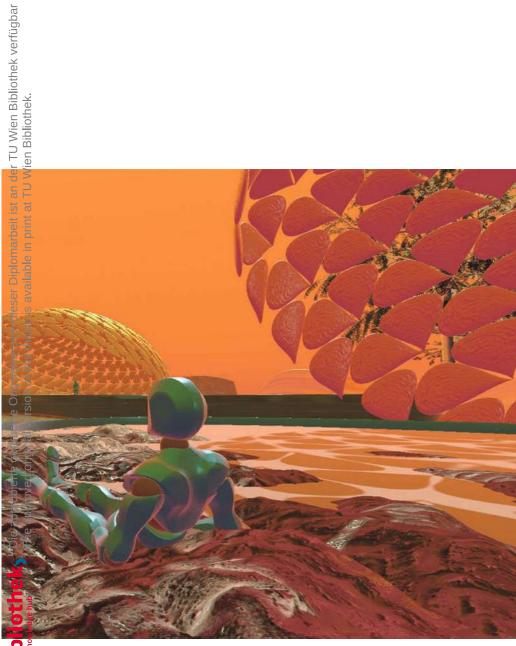




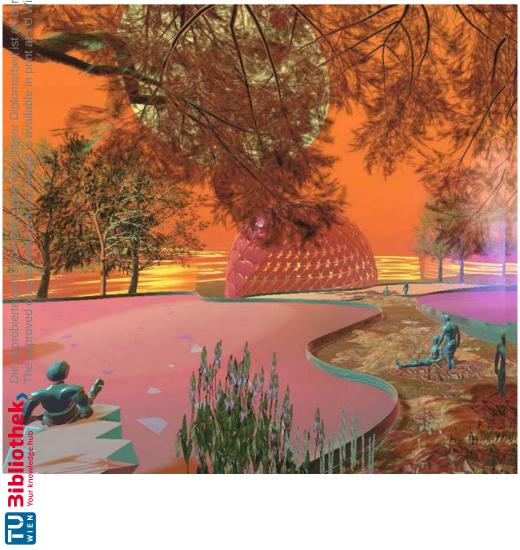


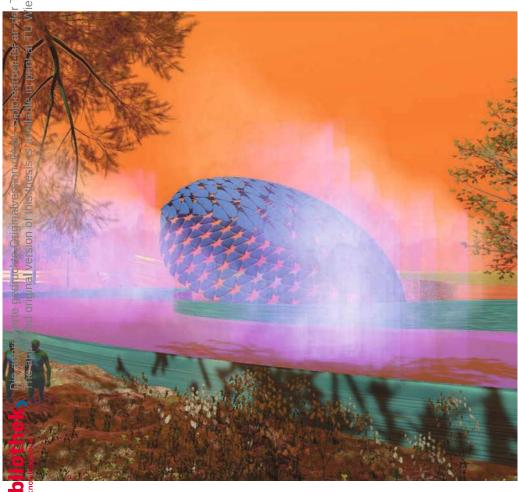




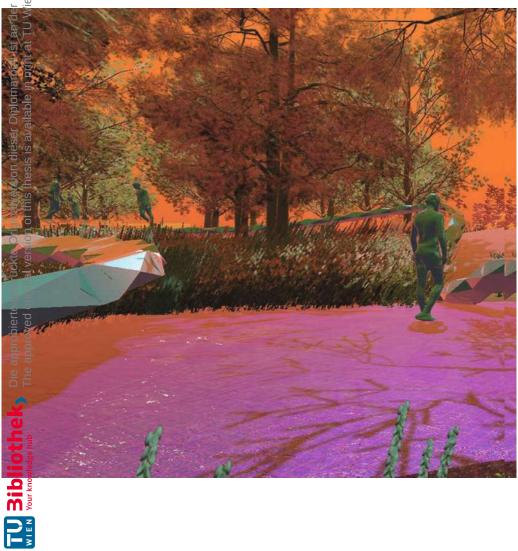


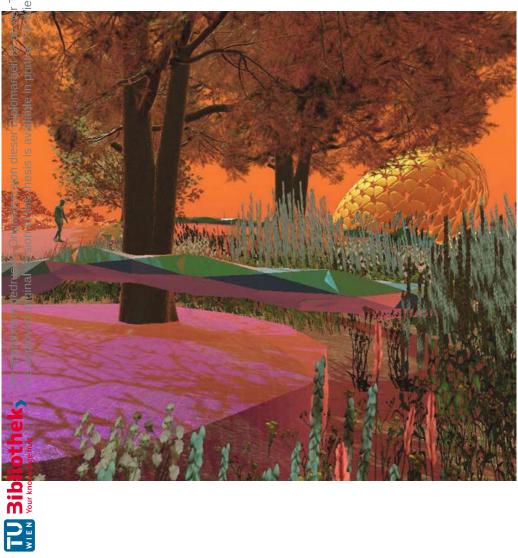






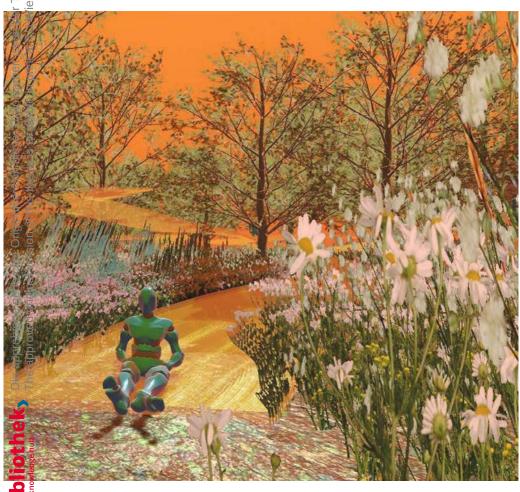














№ 2 The Garden of Soil / The Garden of Roots / Hortus Phasianus



Ti can see in the visitors' faces that they are struck with awe by the magnificence of the Forest stretching out in front of your eyes. None of them knew what awaited vi, so they were standing in the space between the two gardens, looking for your sign of approval for the next step. Ti follow the path and explain to them that from now on, vi will need your special suits to enter the new garden, which used to be a famous hunting area. Hunters in vehicles, armed with modern guns and covered in their hunting suits that blended with the forest flora, came here seasonally to hunt pheasants. Other targeted nonhumans, such as deer, boar, and rabbits, lived there. Your attempt to explain the former relationship between humans and non-humans causes consternation on the faces of the whole group. Humans used to come here to enjoy hunting non-humans, the event which ended up with killing them and bringing them as trophy to the kitchen table. One visitor shuddered at the very thought of eating meat nowadays. "Fortunately, that is no longer the case, and we do not enjoy killing other species anymore", he tells others. Ti confirm that the new relationship and ecological consciousness between humans and nonhumans contributed to the development of this garden, which gradually brought out unique assemblages of species on the ruins of the former hunting area. Ti ask the group to pay attention to the ground, "the base", on which one walks. Although invisible to the eye, it represents an entire living world. Vi are walking on thousands of square meters of an intelligent network of mycelium extending in the soil, living in symbiosis with the roots. It is like a walk on the invisible planetary brain, which breath opens to the circulation of living matter. It is a chthonic, mineral, and secret space full of spiritual communication. Therefore, the purification process at the beginning of your route is essential for everyone, as entering the new garden is an encounter with an invisible and cryptic laboratory.

A living portal of giant trees was woven at the entrance to the new garden. It is a green passage made of densely arranged oak trees, extending deep into the forest's marrow. With every step ti take, ti feel an esoteric connectionwith the soil, which has melted into thick layers, inhabiting the new vegetation of sessile beings. The air around ti becomes increasingly humid and saturated, as if a unique areal mixture is emerging from every existing pore. Ti put on your helmet, show-

ing the group a huge green creature that has occupied an oak tree trunk. A soft green body of supernatural size breathed in cosmic rhythm with the whole forest. Ti explain that it is a moss. a bioindicator, an atmospheric laboratory that lives together with the oak and purifies the air. Numerous oak trees hosted other static species up to their very top, where they merged with the sky. The sunlight was barely perforating through their denselyspread bodies, creating a dark atmosphere on the ground. A hidden path appeared under your feet, which rose from the ground and lifted the whole group. Its winding body leads you to the garden's centre by penetrating the forest on its voyage.

The group stopped for a moment, a little frightened by the image that unfolded in front of them. Something was perpetually moving, revealing its physical and living presence among the forest's trees. The colossal membranous bodies locomote slowly between the treetops and the ground, creating their own areal environment. It appears they can deconstruct existing gravity by creating their own force and impulse towards the centre of the Earth. The transparent skin of the structure revealed the inside of the circular organism, inhabited by an unknown breathing matter. It circulates throughout the form by attaching it to the starting points of its extremities. These skin extensions descend towards the ground and, like the tentacle, with every inner impulse, try to infiltrate down into the invisible space of the soil. Ti explain to the group that this is a hybrid apparatus, both areal and terrestrial, floating in front of vi, connecting and establishing the relation between the Earth and Sky, soil and air. The primary function of its outer membrane, the aerial part of the body, lies in the deconstruction of harmful particles in the air and its self-purification using solar energy. Its second body, anchored to the earth and rooted in the soil, devotes itself to deep terrestrial communication. Its role is to be part of an infinitely intelligent network that actively collects and transmits data into the deep latent corpus of the soil. This symbiotic relationship with other living matter, initiated by the sun's energy, displays the collected data to the other gardens. In this manner, the gardens remain incessantly connected by an underground network. Standing in front of a floating body, ti can hear every breath it takes like a soothing melody of the creation. Its respiration is carried out by the upper circular body that floats above vi like huge esoteric lungs, merging with the lush crowns of the oak. It is a permanent levitation performance of constant circulation, rising and falling, touching and pervading the sky and soil of garden biotopes.

Ti invite the group to pass through this archipelago of floating bodies. Ti touch its extremities that are attached to the ground. Its vibrant, resilient skin doesn't allow ti to play withit for toolong. Ti can see how its ends connect to the base and penetrate the soil. As if it vibrates slightly on the surface, revealing its secret underground activity, the tremors under your feet push ti away from here. The soil crust is soft and glassy enough for the group to slide behind you without too much effort. Bruising the smooth surface, vi move away from the aerial non-engine artefacts.

Ti become more aware of the presence of a synergistic invisible web that actively connects the world beneath your feet. It is all around you as well as the Forest into the group started to disappear. Ti suggest to the visitors that vi needs to slow down, and each of vi should find their own oak tree for deep contemplation. By gently placing your hand on the bark, ti demonstrate that it is time for all of us to absorb and connect with the same cosmic energy. It radiates through all bodies, environments, and spaces. Ti, taste the sun and sky under your skin, ti feel your lungs are clean, and your feet are strong. In this immersive union, the Forest is healing vi.

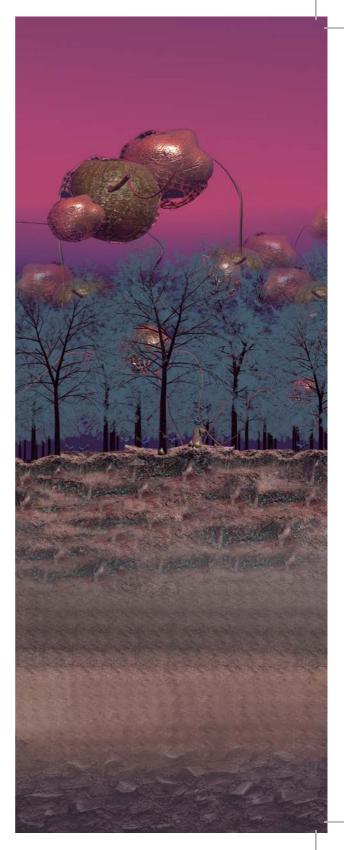
Soon, vi can continue your voyage.

The root is an apparatus of meticulous deconstruction of forms and geometries from the terrestrial surface, starting with the force that seems to determine entirely our life, the life of mobile animals: gravity. 10

...if we are to distinguish and identify organs according to their functions, the roots of plants are analogous to the head in animals. 11

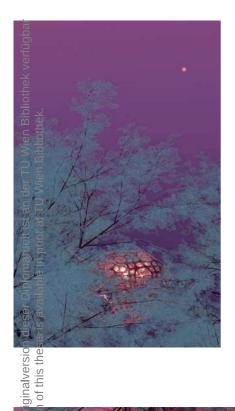
<sup>10</sup> The Life of Plants, A Metaphysics of Mixture, Emanuele Coccia, 2019, Polity Press, UK, S. 83.

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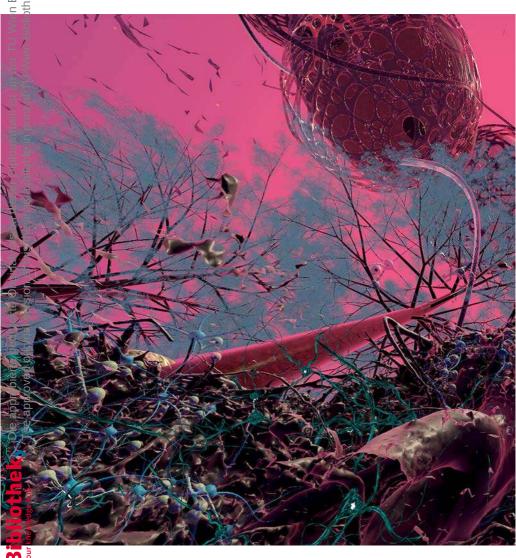




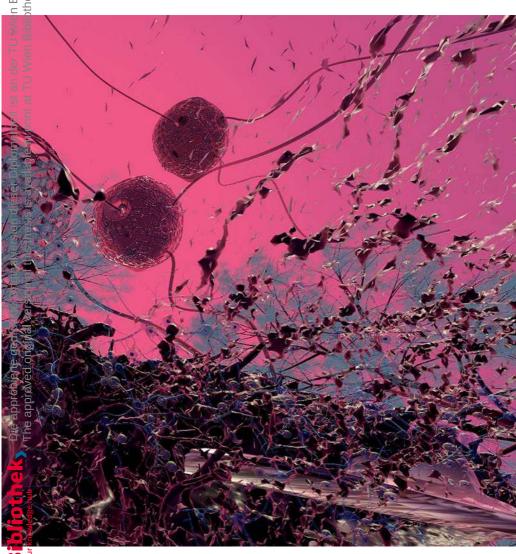




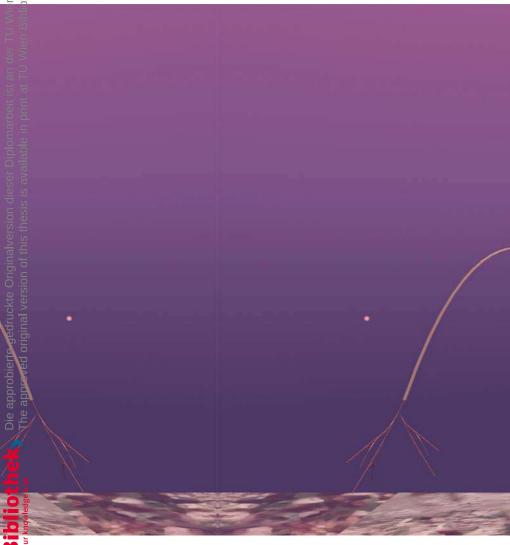




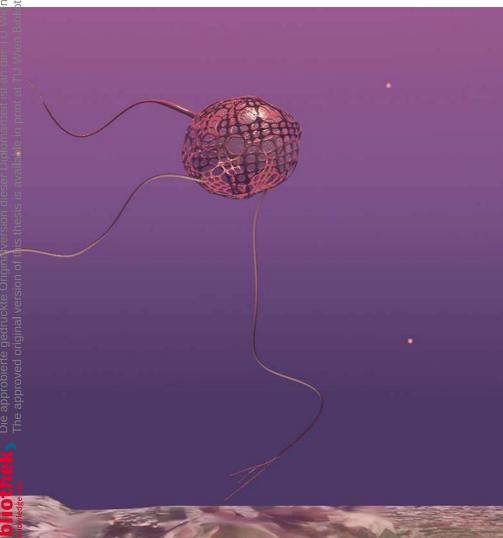




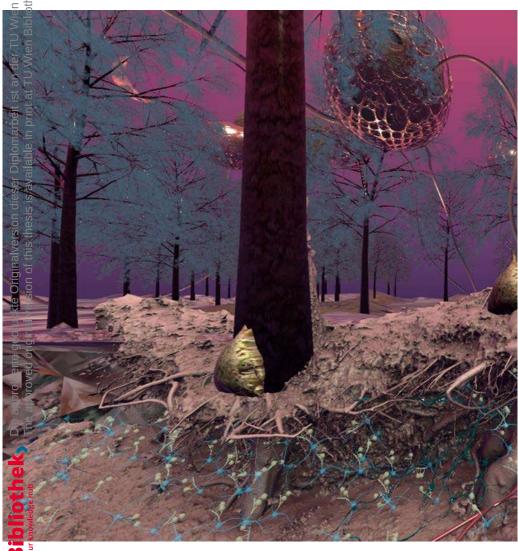




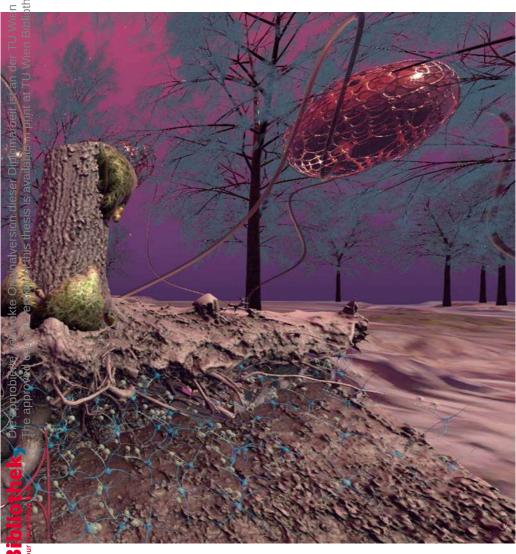














№ 3
The Garden of Air /
The Garden of Leaves /
Hortus Haliaeetus albicilla

On the way out of the Forest, ti make a sign to the group that it is time for a small break. According to your watch, ti still have time, it's only 4 o'clock, and the sun is still out. Ti, take off your helmet and breathe in the fresh air. In this most elementary, rhythmic, unconscious act, without making any noise, ti flourish your lungs with cosmic fluid to take from the atmosphere what the other non-humans give it. Your group follows the same process and does the same as ti. Ti demonstrate that vi all share the same breath and vi all depend on the lives of others. This isthe vital pneuma, our world, where we inhabit the air through the atmosphere and live in symbiotic relationships with every living organism. Ti explain that the following garden, that we are soon approaching, lies on the remnants of a previously large cultivation area. The anaerobic, oxygen-free environment in the soil profile, where some organisms have become accustomed to life without air, was the perfect place for growing rice. For years, rice grew there, producing through its decomposition process bioavailable nitrogen, which supported the productivity of plants. However, as a harmful by-product and result of the activity of anaerobic microbes that live on the roots of plants, that area was one of the primary sources of methane, the potent greenhouse gas emissions. The group is shocked knowing that methane has more than 80 times the warming power of carbon dioxide over the first 20 years after it reaches the atmosphere. Ti calm themselves down by pointing out that the garden has a new stage: the nitrophilous pastures of air designing. Our entire biosphere, the world of living things, resides in the event of breath agriculture, which is present and enclosed in the green climatic laboratory and is constantly exposed to the energy of the Sun. Ti draw the entire group's attention to the small, resistant, permeable structures that produce oxygen and free it into space within our atmospheric sea. These fragile, seasonal surfaces, the leaves, can trap solar energy and transform it through their green pigment chlorophyll into living matter. "Then our life and bodies entirely depend on the leaves", says one of the visitors-"on air quality because of what they exhale we inhale and vice versa." Ti confirm that in a reciprocal act of breathing, we all co-exist together from the very beginning of our origin



on this planet and that the air is our second sea, the fluid above the earth's crust, that we must keep clean and purified for future generations.

High in the oak treetops, massive "fortresses" of branches can be seen. Ti reveal the secret to visitors that these are the nests of a previously endangered bird species. Numerous populations of whitetailed eagles now live freely again on the edges of the forestand, without any human disturbance, occupy their territories at the top of the food chain. They are the kings of the marshland, where they hunt their prey by rushing through the atmospheric ocean. Ti raise your head to the sky and say, filled with awe, that they will guide us to the next garden. Leaving the forest behind, vi continue your way through the marsh landscape towards the entrance to the third garden. The humid air rising from below, where the solid ground does not exist, filled the lungs of the entire group with some uncanny pressure. Ti suggest vi should put on your helmets before vi enter the new zone. The swampy ground under your feet gradually moulds into a green plateau of dense and fresh vegetation. Without notice, vi found yourselves in the middle of the garden. Vi are surrounded by an almost transparent autonomous landscape of numerous small membrane domes that open to the sky like a cosmic connective tissue. Ti explain to the group that vi are on a "farm of breath", where the biotransformation of the aerial space is occurring. Subtle transparent structures seem to grow out of the ground, turning the garden into an archipelago of climatic laboratories. Rooted in the soil, they transport methane below ground by the underground web and then outwards through their permeable skin. The outer membrane is quite resistant to the external conditions around vi. Ti touch the skin carefully, feeling under your fingers a humid adhesive layer that moves rhythmically as if it were breathing. This sur-face is home to unique microbial communities, methanotrophs, that have the capacity to regulate methane emissions. Ti invite visitors to take a closer look at the colonies, which grow near a metal anode, one of the electrodes, in which they donate electrons resulting from the conversion of methane. "These microbes breathe methane and turn it into electricity"-ti add, showing that all the necessary energy for the whole Zone and the City comes

from that source of multi-species relations. Wiping the fogged surface of the skin membrane ti invite the group to join ti in exploring the interior of the laboratory pavilions. Each has its own rhythm of opening and closing towards the sun, depending on the vegetation and the living matter that inhabits their viscera. The nearest pavilion is just opening in front of vi. Vi enter the pellucid womb with caution. The fused structures grew out of the green turfy ground. With great curiosity, ti observe in the middle of the symbiotic communities producing new biomaterials. Ti point to your suits, saying that they are made of the same biofabric that vi can see growing right now around your legs. Vi feel that your bodies merge with the space surrounding vi and that vi become part of its transparent tissue. The various plant species are contained in an organic grid of pavilions sequences that ti can observe from the inside. Placed in a rhythmic system, they open their limbs and expel massive amounts of fresh oxygen by means of oxygen plants. It looks like wide clouds of pure oxygen are intermittently elevating over the garden landscape.

In this shared reality of air design, ti are being exposed to the simplest act of your existence, the sphere of breath, purifying your body, nature and mind. Ti feel that vi are ready for one last aerial round through the garden. Ti approach the liquid exit that displays the fluid matter of the outside world from a distance. Ti can smell it on your own skin.

It bubbles out there.

To inhale is to allow the world to come into us-the world is in us-and to exhale is to project ourselves into the world that we are. 12

To breathe is to taste the world. And, for each living being and each object, the world is that which is given through and thanks to breath. The world has the taste of breath. 13

We do not inhabit the Earth, we inhabit the air through the atmosphere. 14

To breathe is to know the world, to penetrate and be penetrated by it and its mind... 15

<sup>12</sup> The Life of Plants, A Metaphysics of Mixture, Emanuele Coccia, 2019, Polity Press, UK, S. 66.

Ibd., S. 72. 13

<sup>14</sup> Ibd., S. 60. 15 Ibd., S. 56.

<sup>74</sup> 

If the world is unified by a common and universal breath, it is because breath is the orginary essence of what the Greeks called logos, language, reason. 16

Plants are the breath of all living beings, the world as a breath. 17

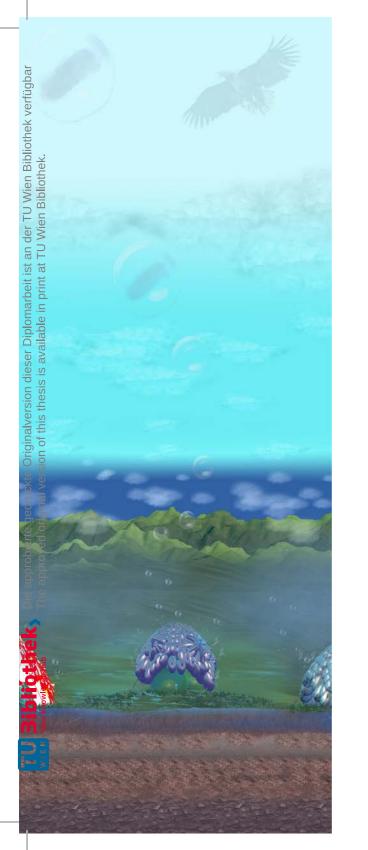
Thanks to plants, the Earth definitively became the metaphysical space of breath.

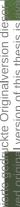
The being in the world of plants resides in their capacity to (re)-create atmosphere. 18

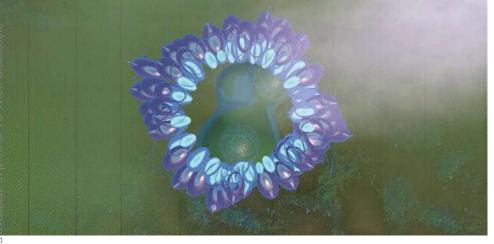
> 16 Ibd., S. 52.

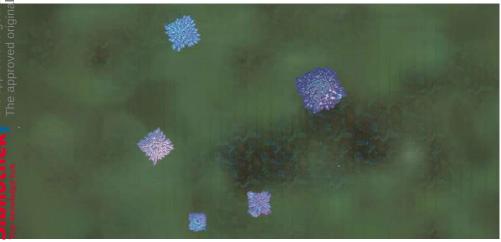
Ibd., S. 36. 17

18 Ibd., S. 45.





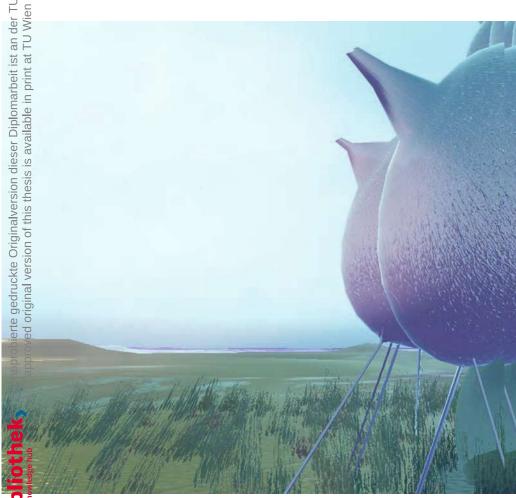


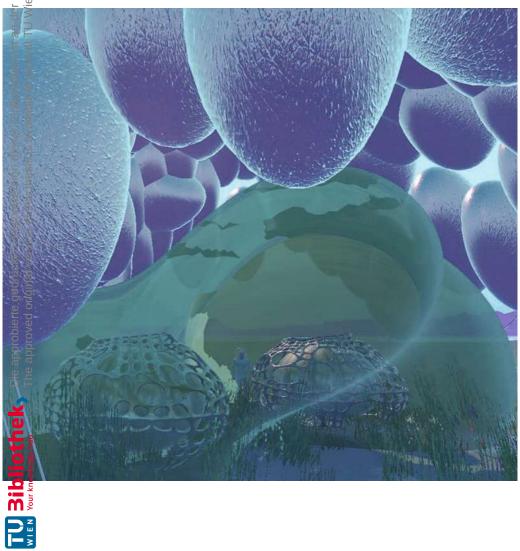




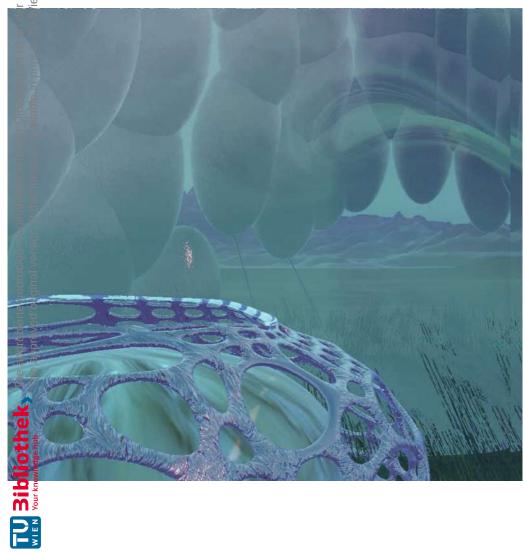


















Nº 4
The Garden of Water /
The Garden of Flowers /
Hortus Grus Grus

In the beginning was the Water, and the Water was with fish, and the Water was fish. In primordial soup vi were all fish that gradually rose to the surface and adapted from the sea to the earth. In the transition of thickening and vibration of the water vi never left your fluid physical environment. It is still in vi and around vi.

Ti ask the group to become fish again, to experience the last garden and its fluid medium through the eye of the fish to feel the cosmic body of water. Visitors accept the new playful rules of the aqueous medium, searching without success for the entrance to the new garden. This time vi are not allowed to enter the garden as humans, ti remind them this space has been intended for a long time only for the non-humans. Over the past 30 years, human hands haven't touched this garden. The last known human activity in the previous century turned these vast swampy areas into fishponds with extensive fish farming. But very quickly, after a large number of carp was caught in fishing nets and passed through the stomachs of the local humans, the ponds remained a neglected and abandoned zone. The water surface of the fishponds opened its inner world to attract non-humans, specifically birds. Many would migrate seasonally, depending on the climate and atmospherein their worlds. In this intimate attraction process, ponds and flowers have something in common. They are both frail bodies that expose themselves to absorb the world to be modified by it. They construct an environment within themselves to host other species, open to multiplication, life and death. As a collective, they provide shelter to others at night, protecting them from nocturnal predators. In all their colour, smell, and form variations, they encounter the other individual. These cranes follow the cosmic rhythm of the season, navigating through the rivers of the atmosphere and migrating to the winter garden. Former fishponds fused into the new garden territory and the staging area of these charismatic non-humans, the species, grus grus. Ti point out the water surface in the distance, explaining its role as a communal roosting. This is the collective place where the cranes sleep together in the shallow water at night. Already knowing their winter activities well, ti present their schedule in detail. After eight o'clock in the evening, they gather and roost collectively in the water, spending the whole night there until

85



eight in the morning. In this nocturnal social event, they synchronise, facilitating protection against predators, mate selection and foraging efficiency. They leave the water habitat at eight in the morning and search for food. In grassland, they are usually between 10 and 4 pm and from four to six in cornfields close to the central roots as the corn seeds are their favourite winter food. The whole group is excited to see the unique spiritual experience of these remarkable birds. Ti check the time. It is almost eight, and the sun has already set. Vi still move along the liquid border of the garden. It seems to ti that the air, on the other side, is the metamorphosis of water, as if these two mediums are constantly flowing into each other, leaving liquid traces behind. On the damp ground around vi, vi notice the marks of three toes. It's a good sign, they passed that way, and vi can hear the symphony of their call. The flocks of cranes return to their water bed. Partly, it is a shallow pond area surrounded by protective aquatic vegetation that, like a natural wall, protects its inhabitants from uninvited guests. But as the ponds slowly dried up and disappeared from their natural habitat, threatening the survival of these non-humans of light, new sleeping conditions were created within the fluid body of the garden. Ti show visitors from a distance two central roosting areas that circulate organically and create separate islands. Its watery body flows into small, individual units, which are then united again into a huge circular relief. Humans call them "soundgrusscapes", ti add, feeling the vibration of the water beneath your feet. A special fusion of the soil generated them without any of the humans stepping on the garden ground. A unique alarm code from the cranes' sound graph filtered land around their feet into the nightly sleeping landscape. It perfectly fits their anatomy and nocturnal protective needs. Created as a vibration from the symphony of their calls, it encounters the cranes every evening, opening itself as a cosmic attractor. Vi can also see the second unisonescape more peripherally located behind the first one. It is generated from a crane duet performed by a pair. With its organic relief, it flows into the water islands of the protective territory, providing new couples with a special, lifelong bond. More and more birds' flocks spread over the water's surface, taking their nocturnal position. Soon, in front of vi emerges a magical scene of numerous non-humans standing on one leg. The water

that appears to evaporate in the moon's reflection fuses with the white feathered bodies. Vi would like to touch them, but some special gravitational force distils your fluid environment by absorbing vi at the zone's edges. Ti suggest the group take a comfortable position to observe the birds peacefully for a long time. This is an exceptional experience, a type of meditation and a spiritual ritual of the Zone.

Standing behind your group, who was gradually succumbing to the fluid force of the garden, ti add peacefully: "Observing these non-humans of the sun, the cranes, vi will be happy and will be healed for the rest of your life.

## May the Garden be in vi and vi in the Garden"

The flower is the appendage that makes it possible for the plants-or, more precisely, for their most evolved component, angiosperms-to accomplish the process of absorption and capture of the world. 19

...the flower is a device that overturns the logic of the individual organism: it is the last threshold where the individual and the species open up to the possibilities of mutation, of change, of death. 20

It is principally an ephemeral, seasonal structure whose existence depends on the climat and atmosphere of the world in which it finds itself. It is a risk, invention, experimentation. 21

87

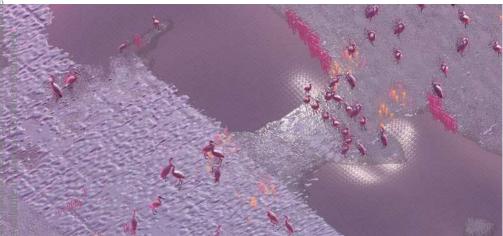
<sup>21</sup> Ibd., S. 110.



The Life of Plants, A Metaphysics of Mixture, Emanuele 19 Coccia, 2019, Polity Press, UK, S. 100.

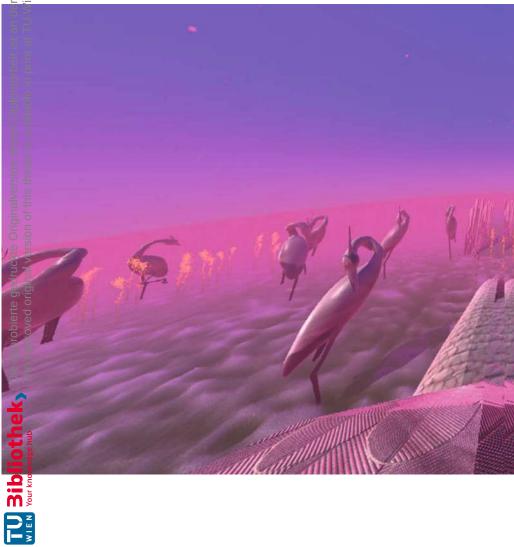
<sup>20</sup> Ibd., S. 102.



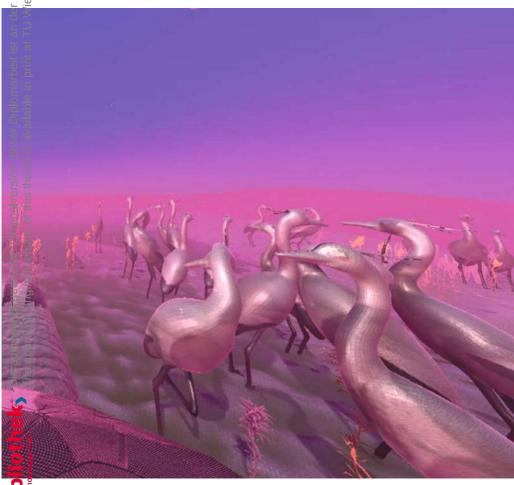








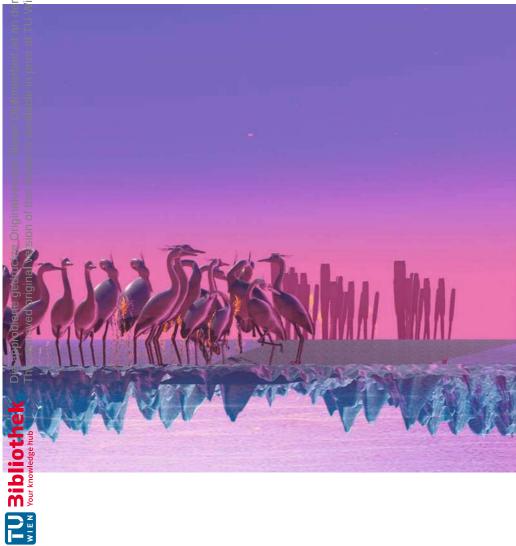






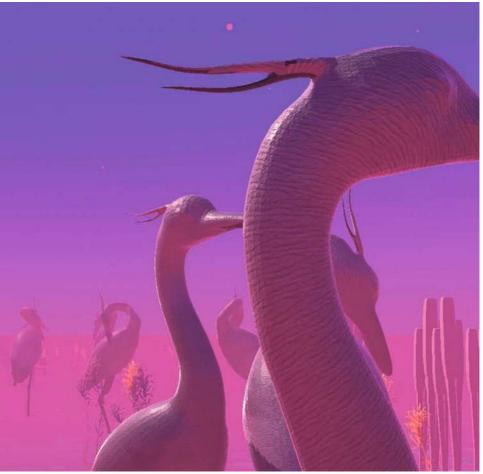






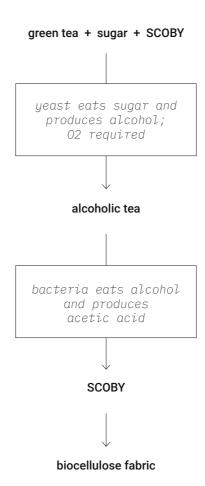






## biomaterials SCOBY1 inventory

experiment on the biocellulose fabric



At a very small scale, within the "walls" of the glass bowl, the microcosmic garden of symbiotic relations was planted in the fluid medium. The growing phase of life creation has begun in the "primordial green tea". Only in the ten days did the symbiotic living matter, another layer of SCOBY, which appears on its surface. The newly created life gave form to the living body, which went through another drying process for another ten days and ended up in the bio-cellulose fabric.



















clean



turmeric



turmeric



fabric mesh



red beet



sodium bicarbonate

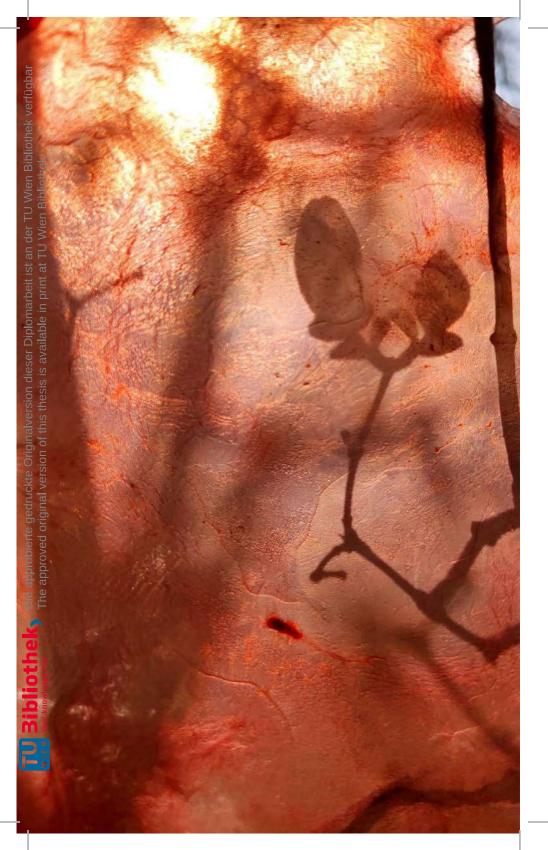




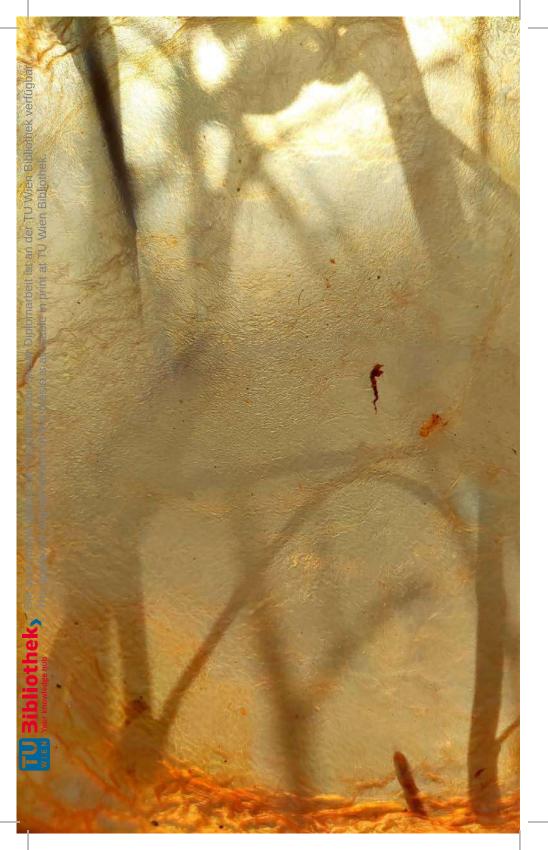
seeds

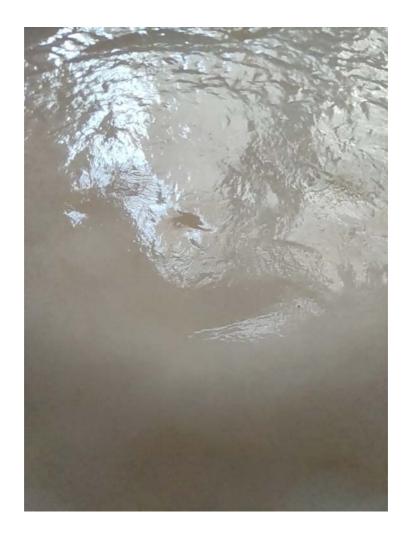


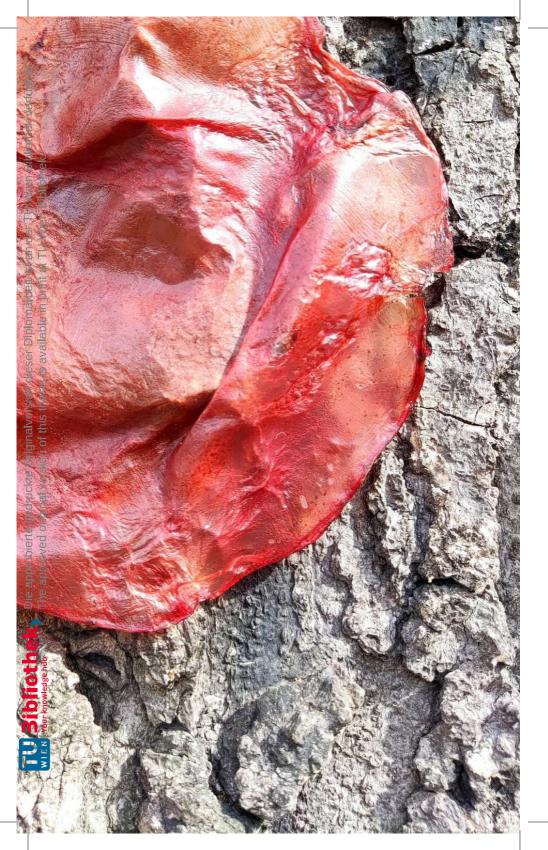
vitamin C











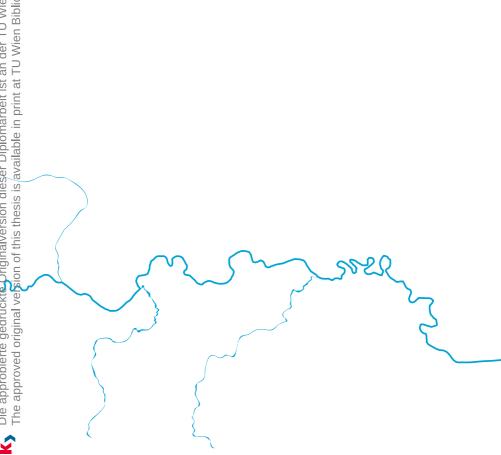


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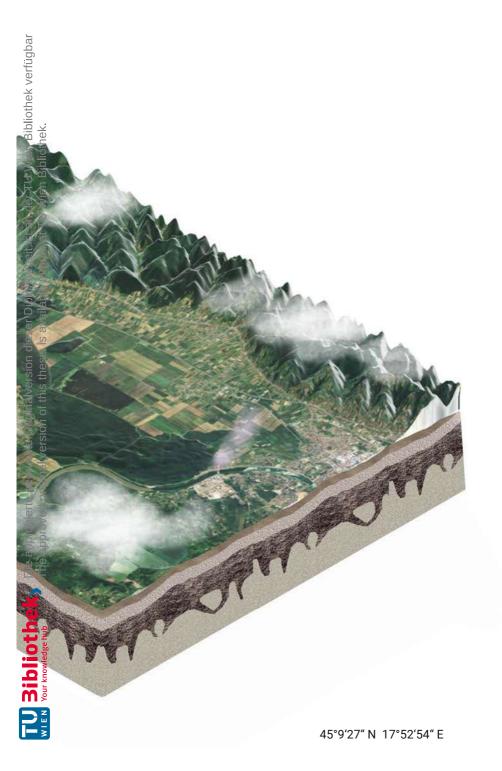
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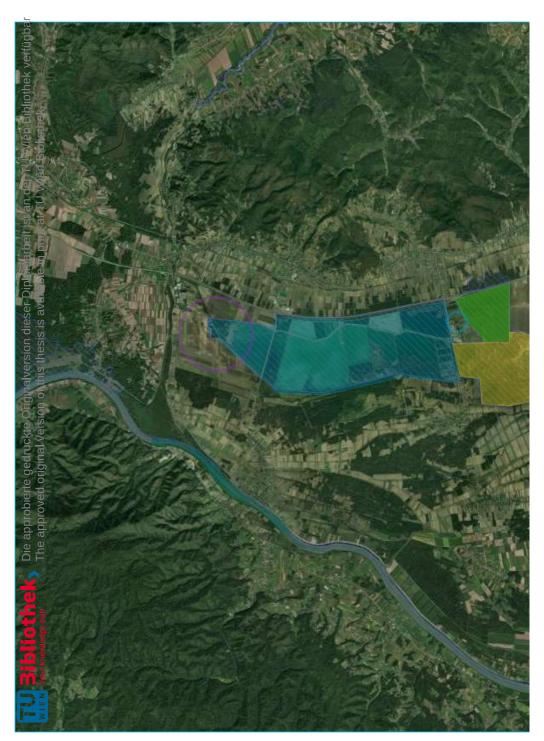
Jelas Polje







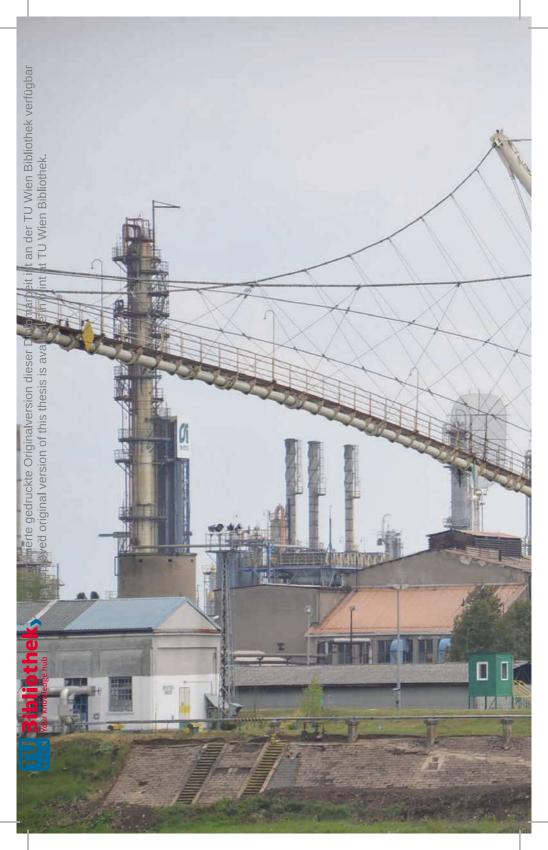


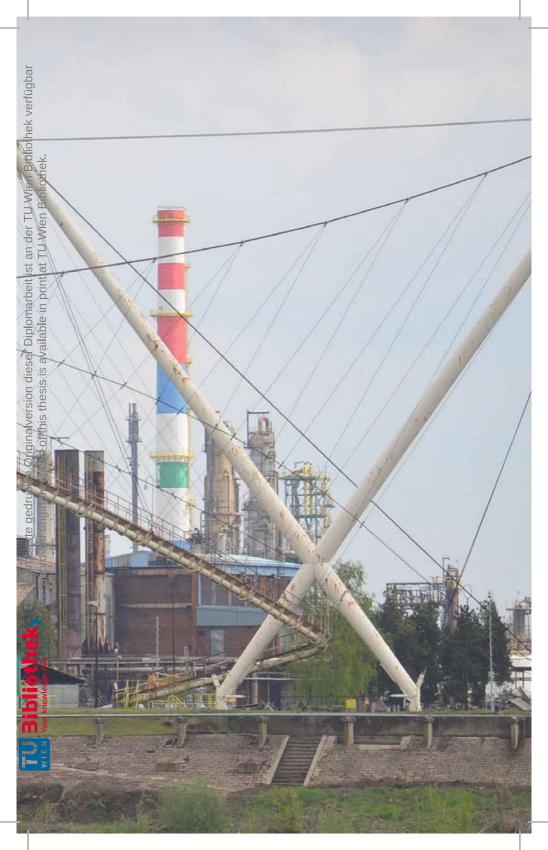




## refinery

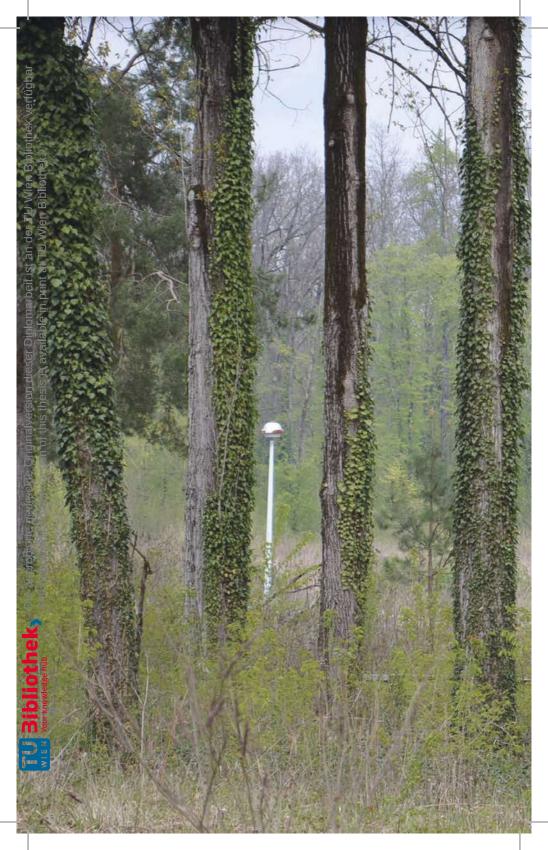
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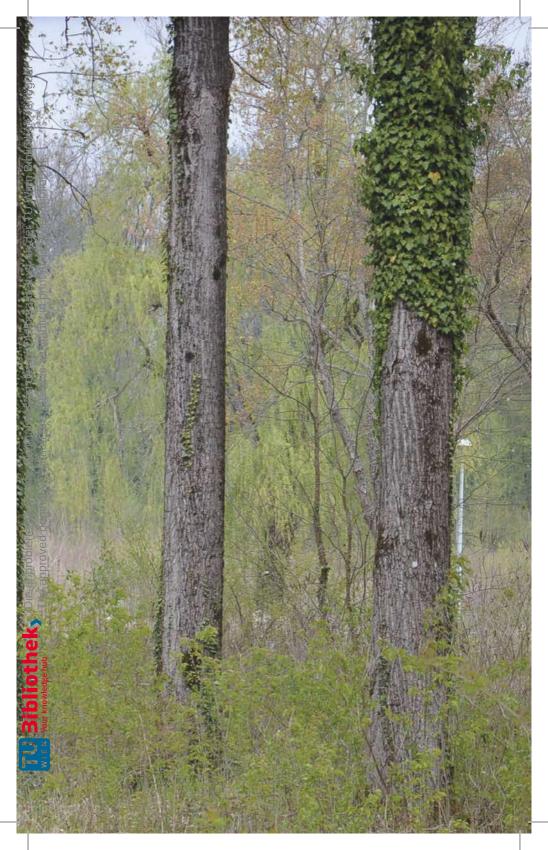




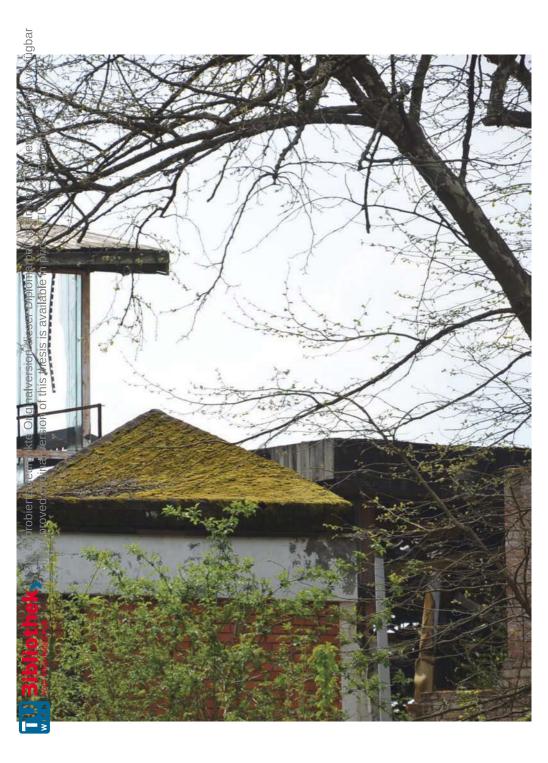
Nº 1 Garden of Ludus / of Pleasure The Garden Hortus of Mixture

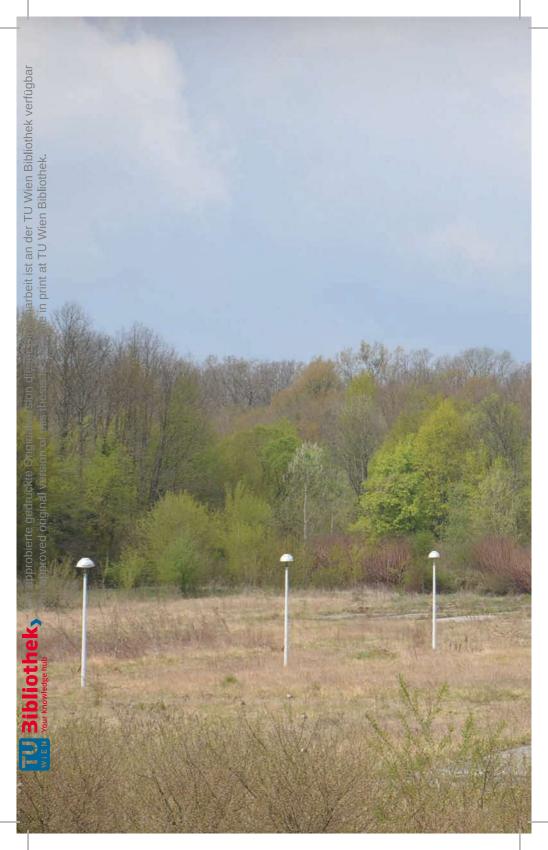
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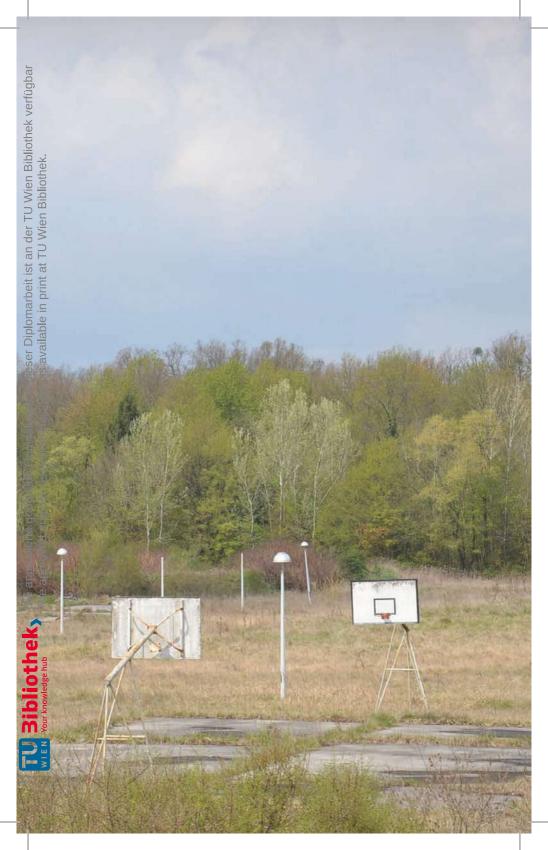


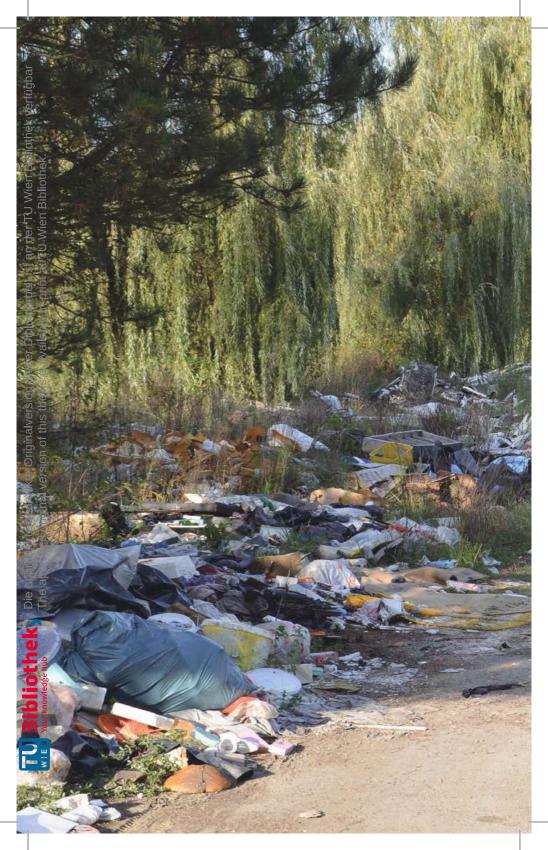


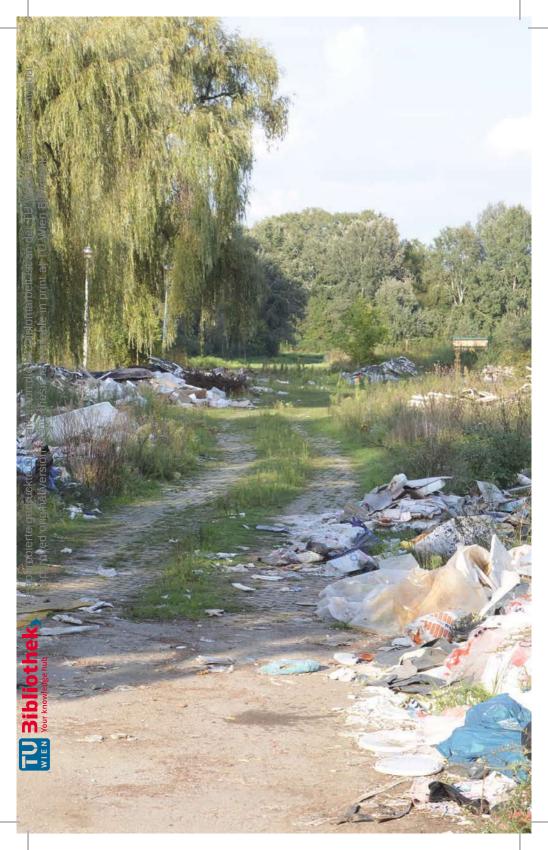


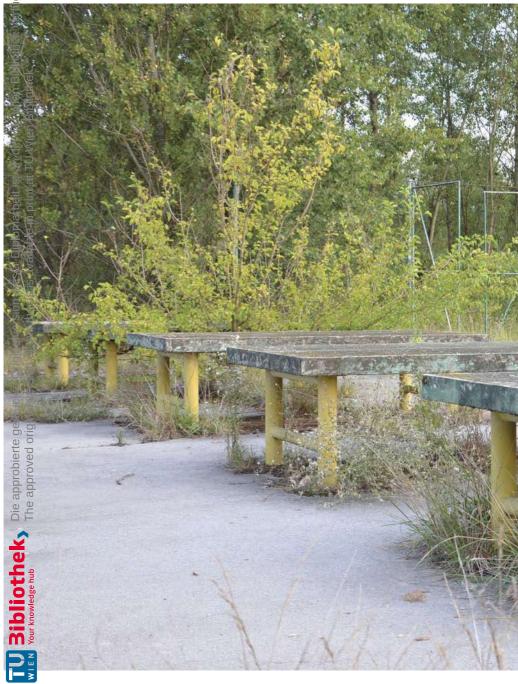


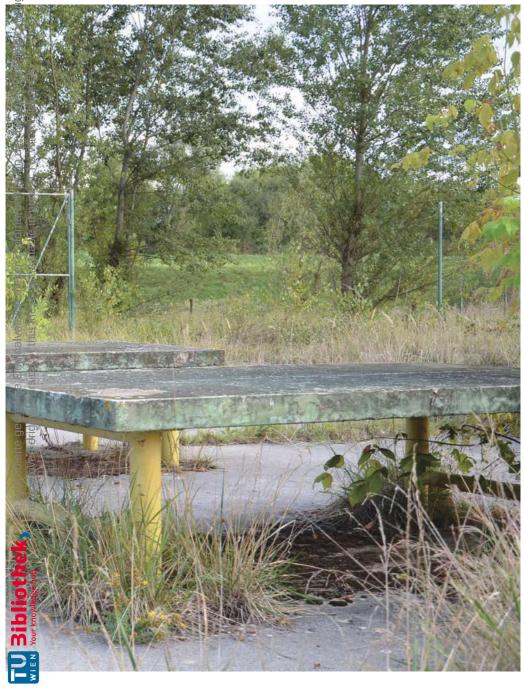








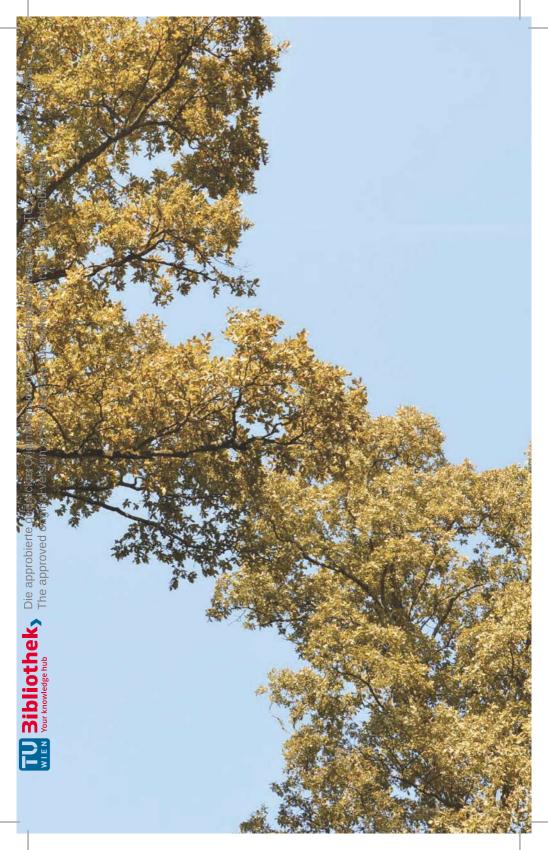


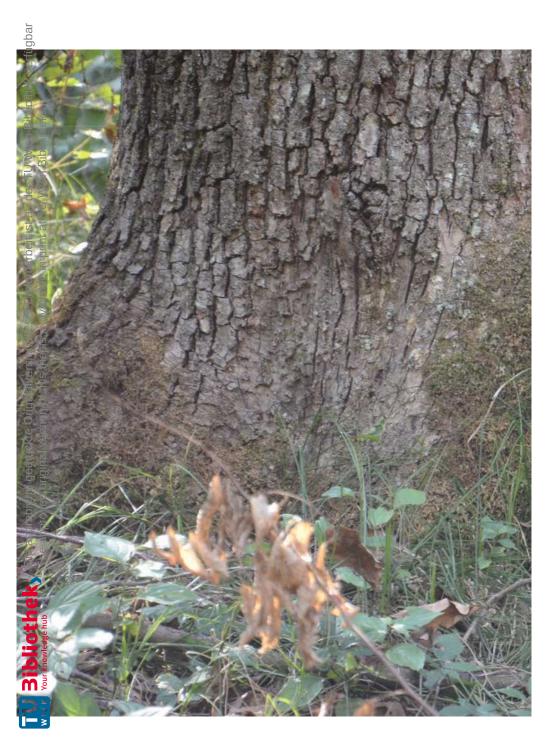


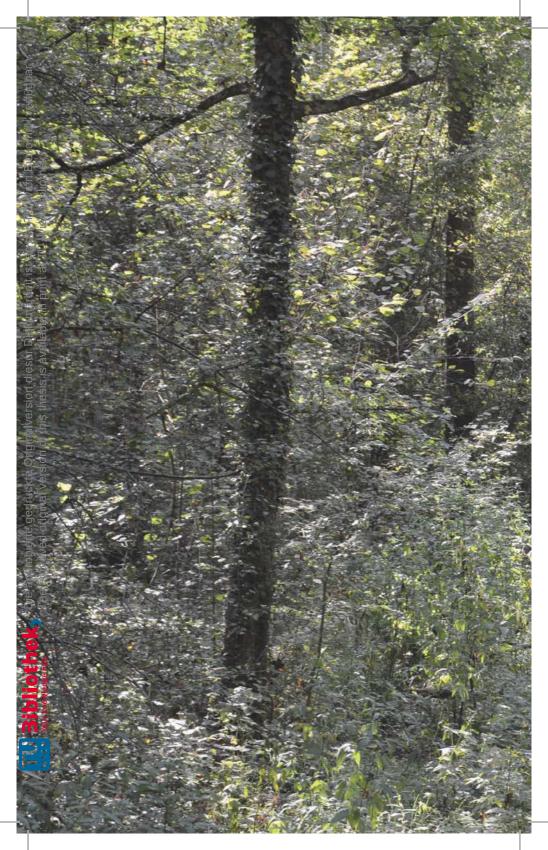
Nº Garden of Soil / Garden of Roots / The Hortus Phasianus

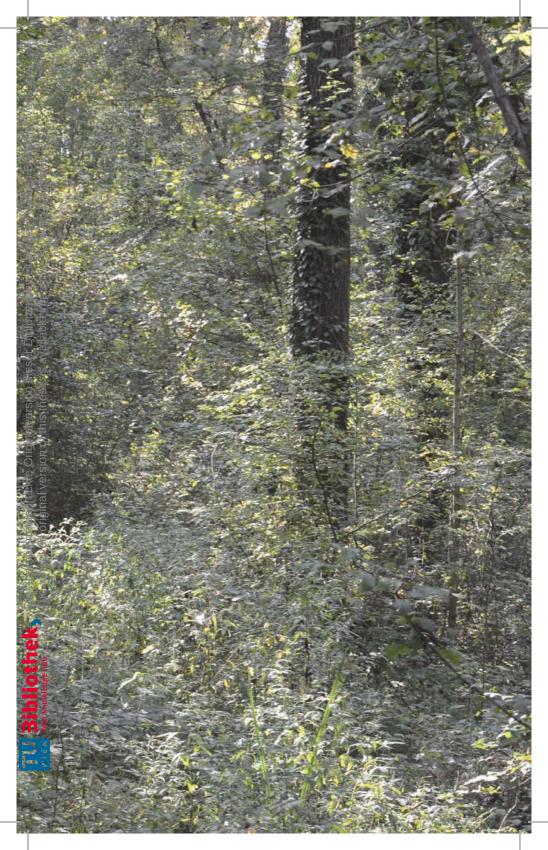
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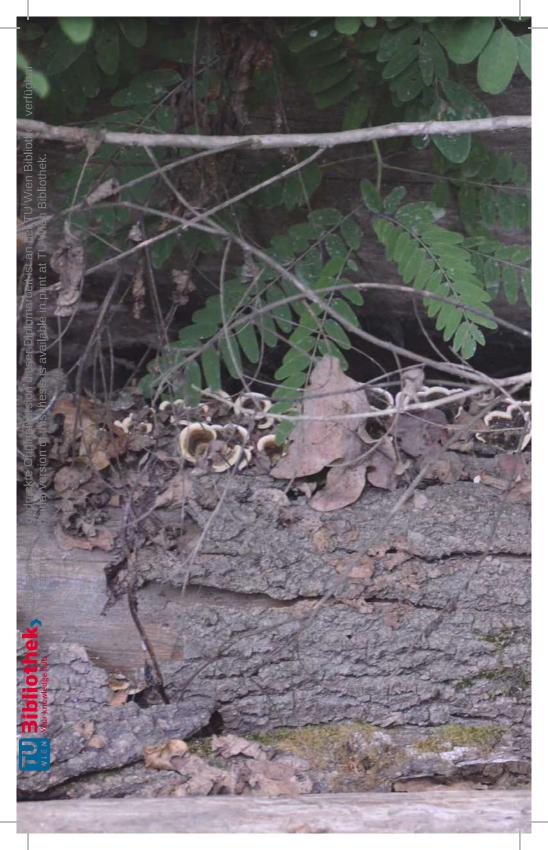


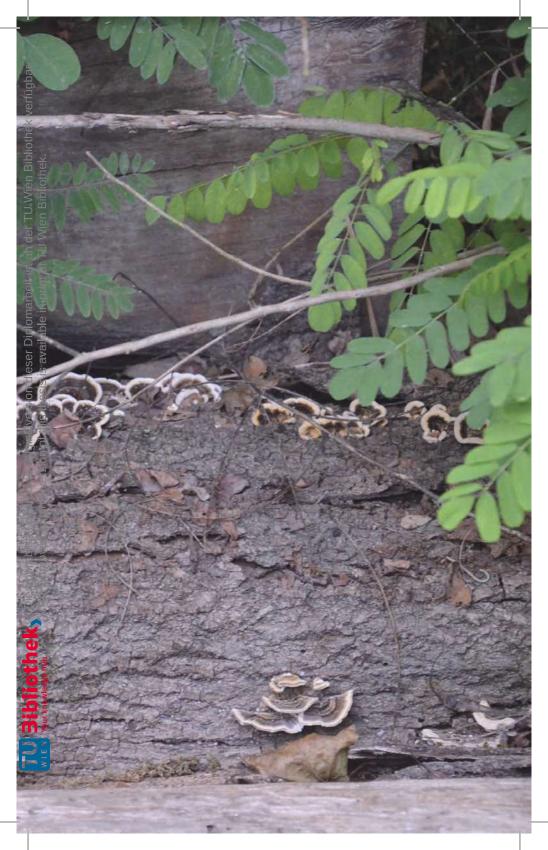


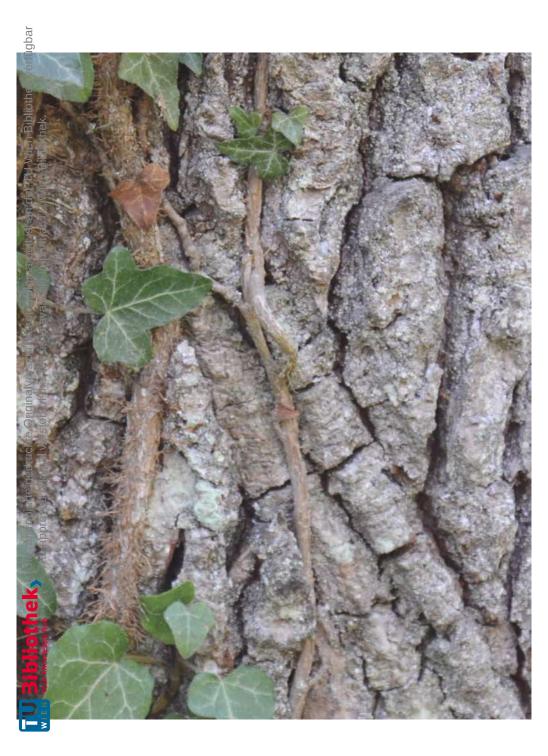












### MIGALOVCI ŠUMA JELAS POLJE

sound in the leaf, sound in the bushes, watching, waiting, on both sides, hiding,

impossibility of recognition, fear on both sides, being exposed and present,

> the feeling of not belonging, what it's like to be an intruder, a newcomer,

inability to communicate, turning back, not recognizing, fear, size, magnitude

buzzing of various insects, noises, snapping and falling branches, birds calling, touches on the face, hands and feet, flies, bees swarms like through a transparent air membrane sound curtain

> dark dense trees, height, smell of tree bark,

humidity, heaviness of air, sweet smell,

burning sensation, nettles, itchy skin,

thin air in the mouth, the taste of damp, suffocating heat, sweat,

a veil of cobwebs that wraps around your legs, a reminder that you are here now

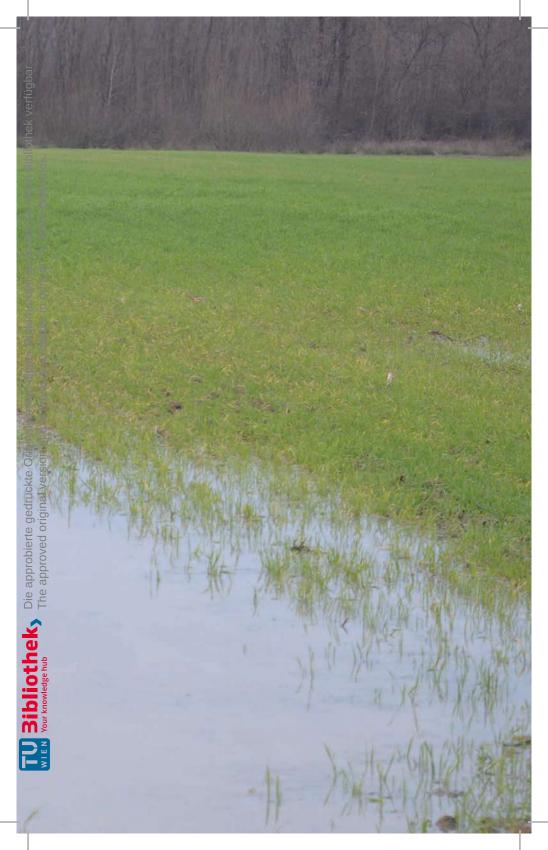
waiting to see if it's moving, alone in the middle of the forest, zooming around it's either alive or it's not

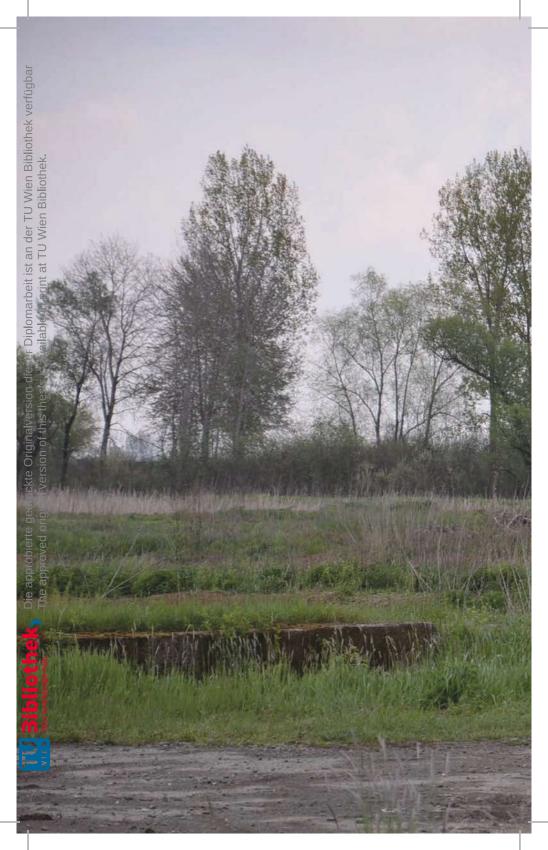


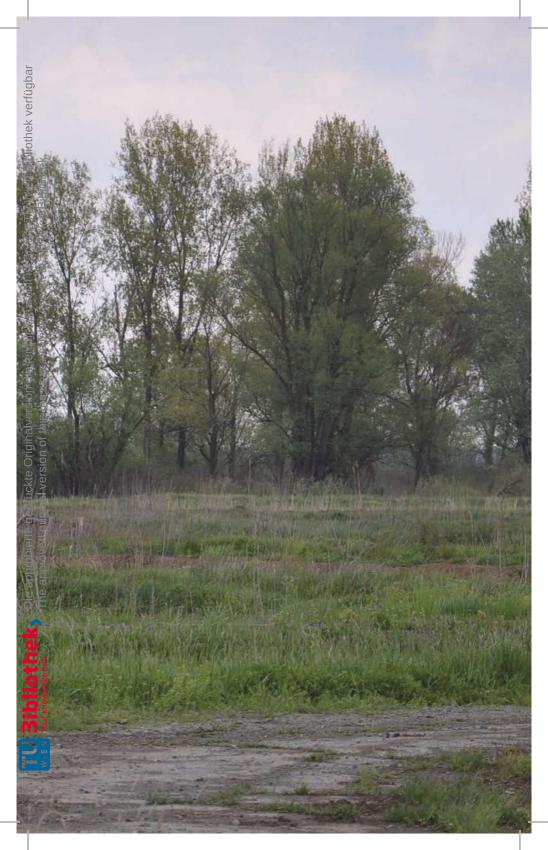
```
Nº
   Garden of Air /
The Garden of Leaves /
Hortus Haliaeetus
albicilla
```

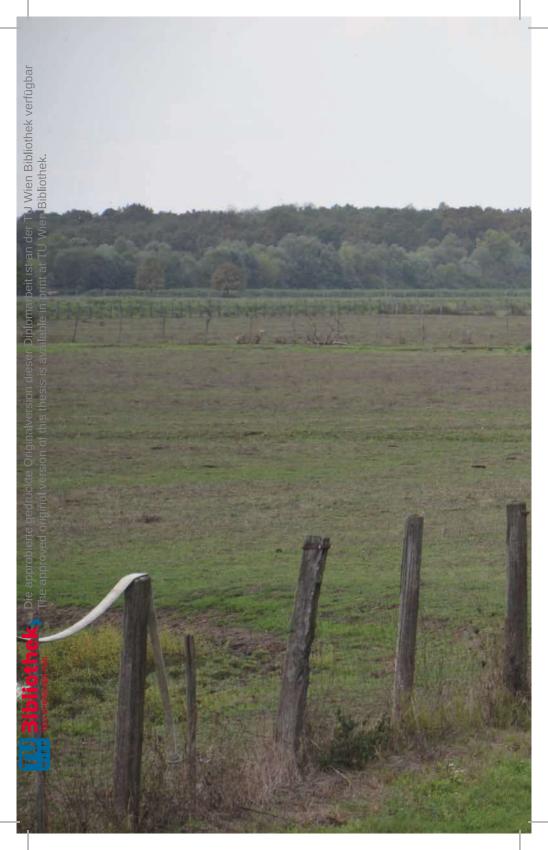
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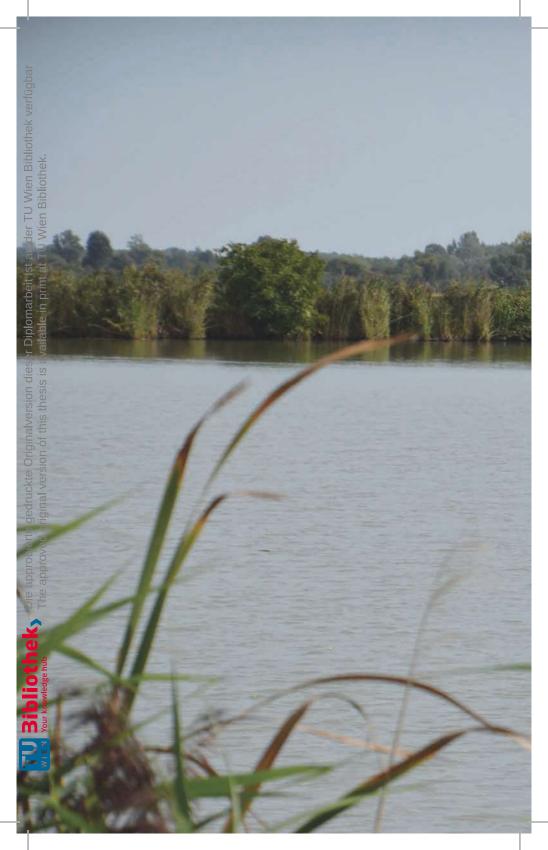


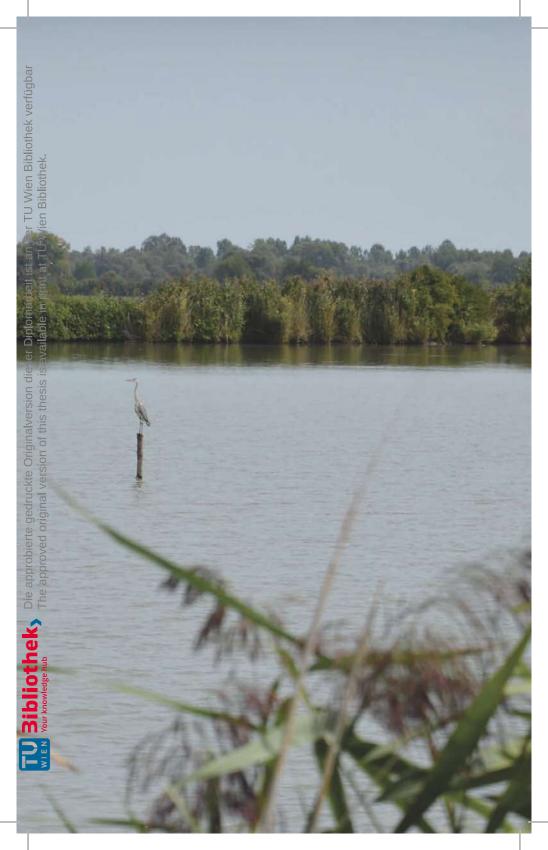


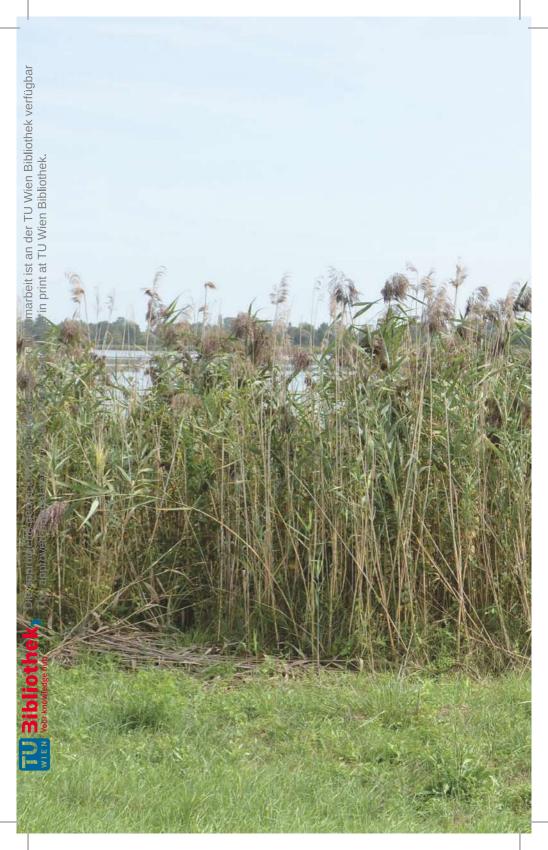


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Nº
           of Water /
    Garden
   Garden
           of Flowers
The
Hortus Grus Grus
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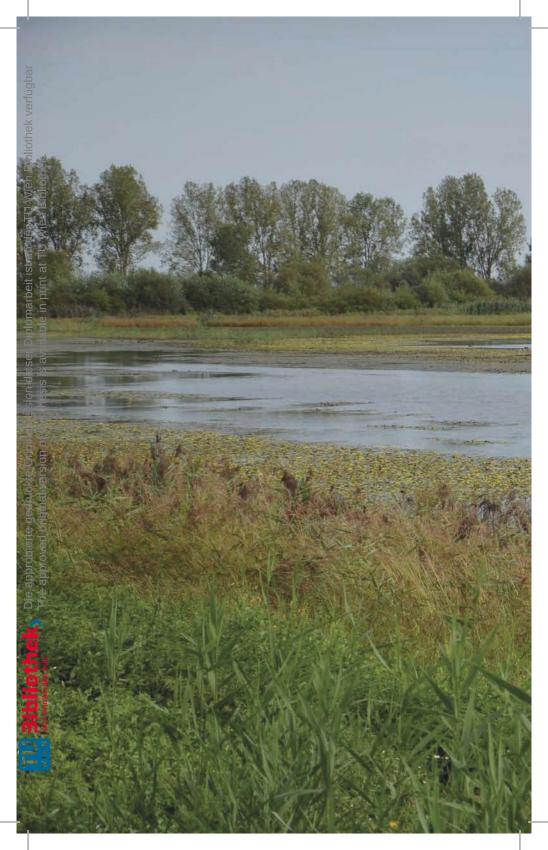
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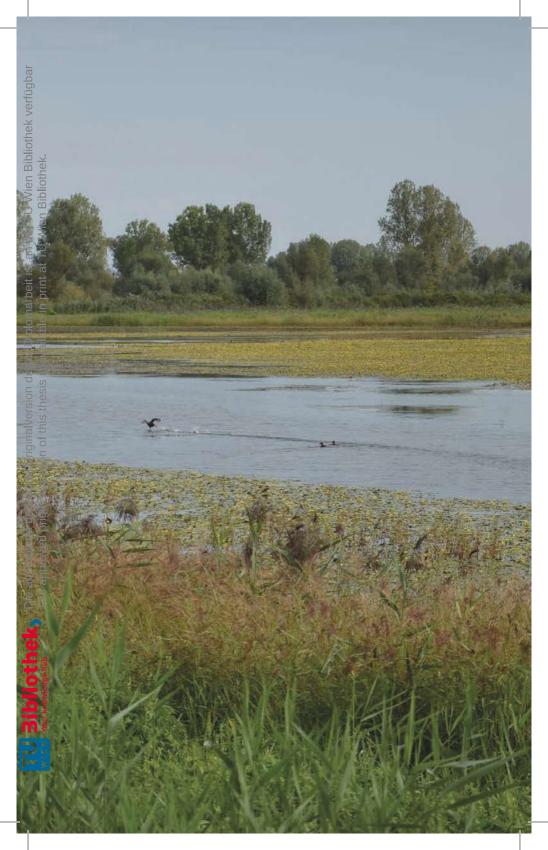


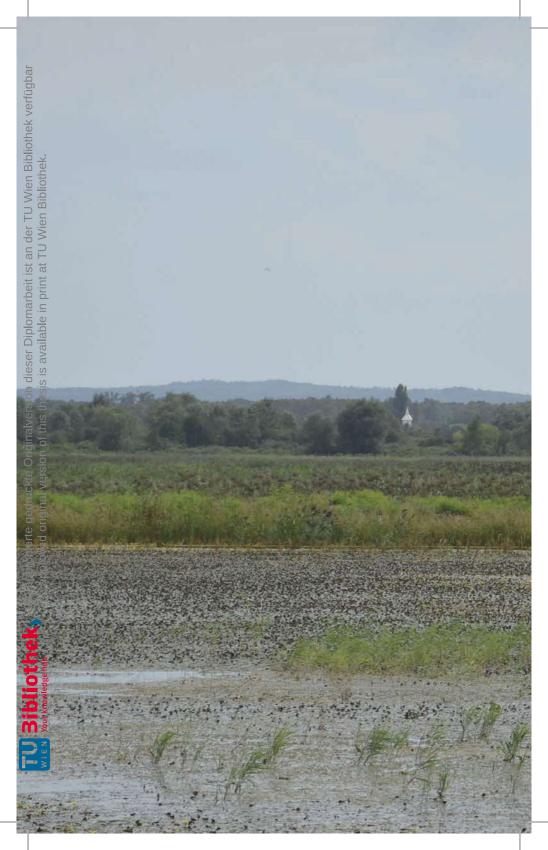


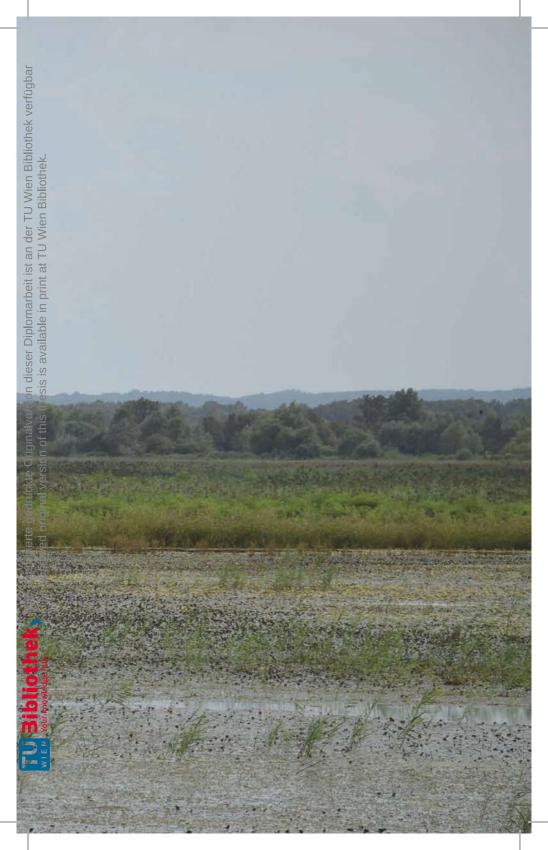












#### RIBNJACI JELAS POLJE

....revi revi revi evi.... crackling, talking, I don't understand I feel sultry I am a new bod yset up here

the mosquitoes the smell of rot is choking me

my body flows into the water while I'm still, it buzzes midges, flies, mosquitoes, frogs

rustling in the water as if the water were boiling it cooks cooks cooks and crackles

I'm not afraid, they're birds

my hand is not in the water I can see it

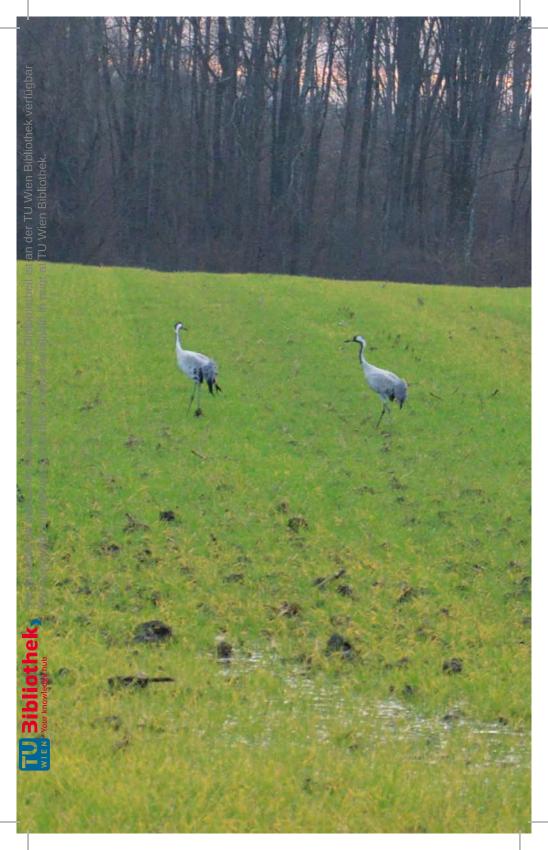
the hand is in the water can't be seen anymore it is unknown warm

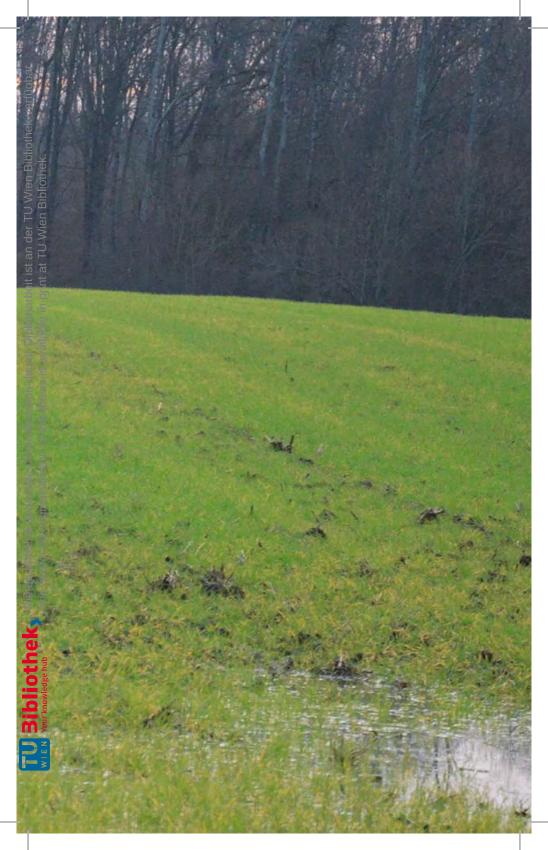
fear I can not anymore it's pleasant the hand is out I breathe

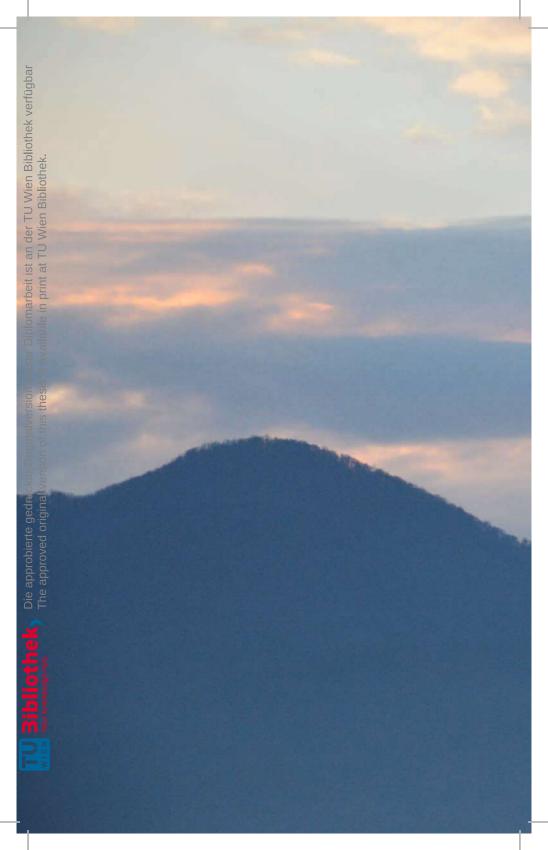


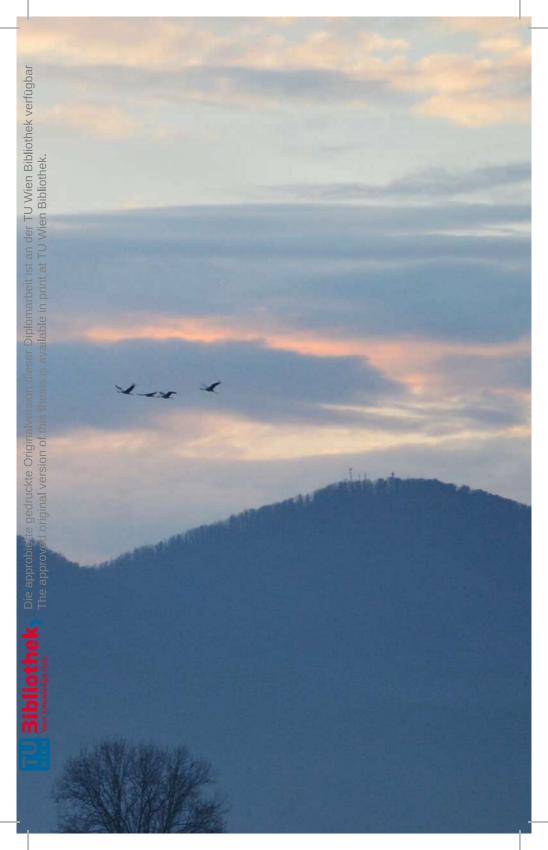
# grus

# field research









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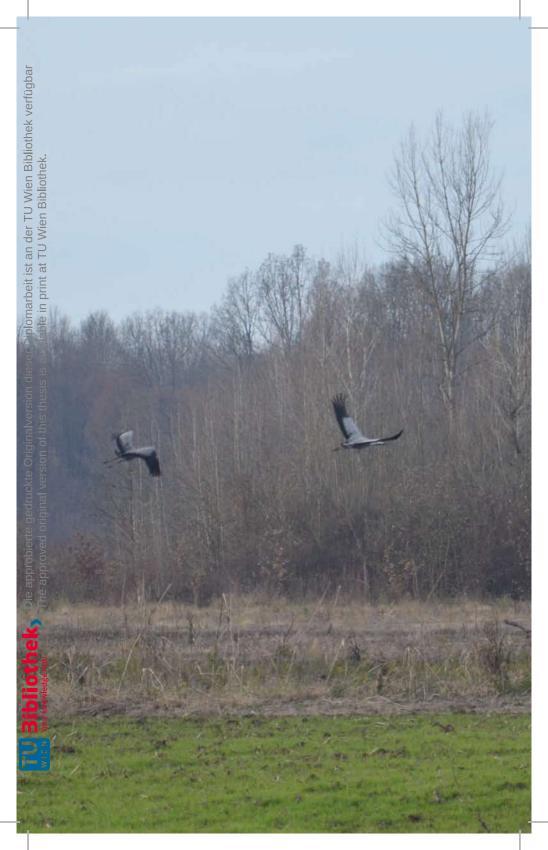






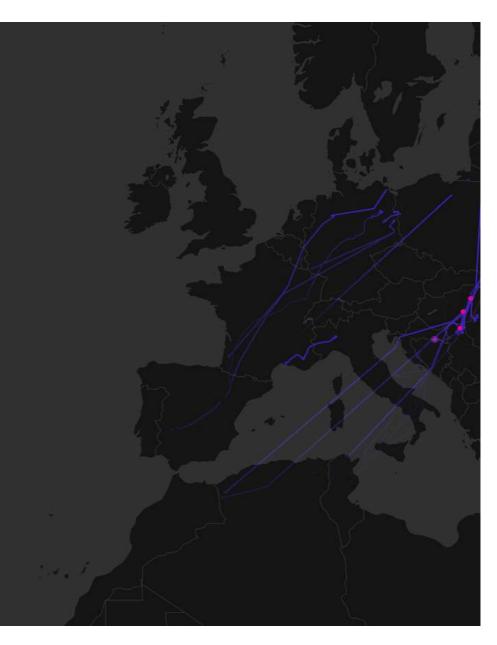


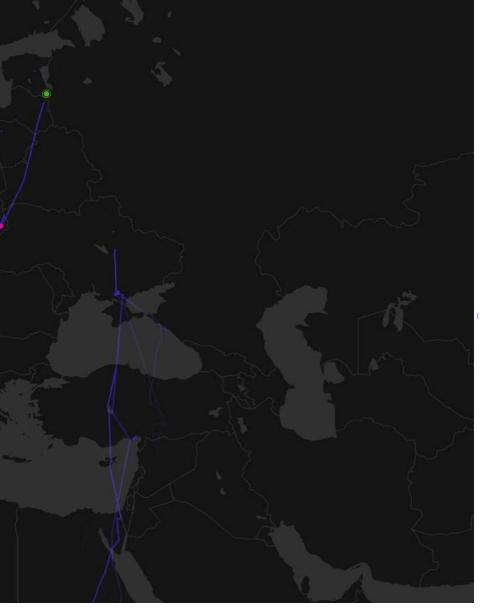


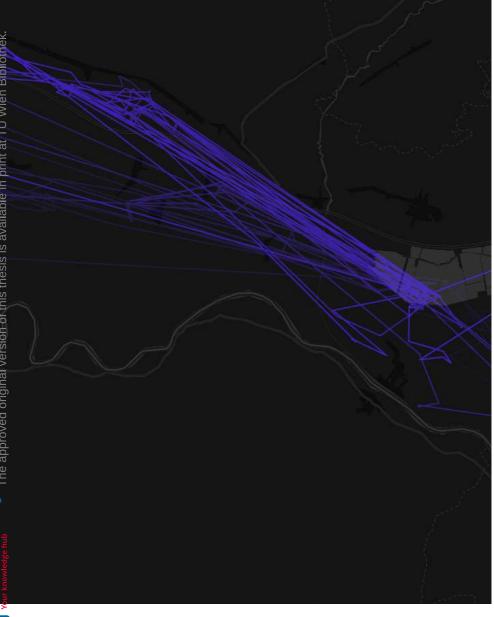




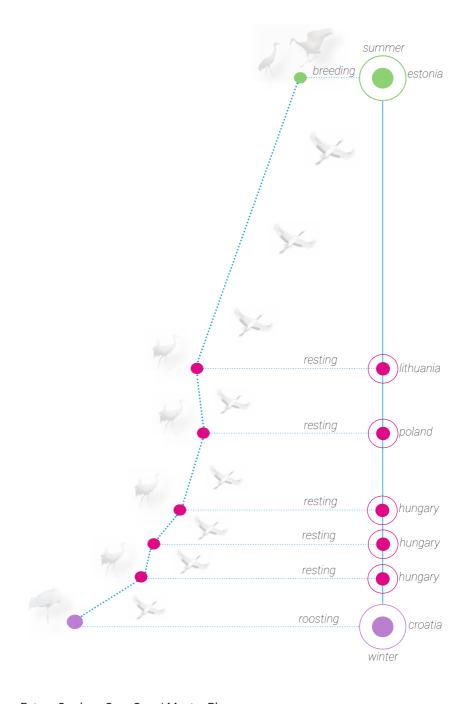


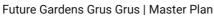












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### IMAGE CREDITS

All Images and Photos by Ivan Jakarić.

except for flyway graphics on pages 192-195; https://bbecquet.github. io/bird-tracking/,

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