THE

APIARIUM Garden

HOW to LIVE WITH NATURE

LINDA KRONMÜLLER





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GARDEN

HOW to LIVE WITH NATURE

A GARDEN FOR BEES AND HUMANS IN THE FORTRESS OF BELGRADE

WS2020/21 AR3A010 - RESEARCH PLAN. LINDA KRONMÜLLER (4939697)



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PERSONAL Abstract

How to live with nature? The current changes due to CO-VID-19 influence the way we engange with our cities in the future. The anthropocene brought up the city as human's most "natural "environment. Though, European cities host more than 10.000 animal species. Instead of constantly fighting against flora and fauna, we'll learn to find new forms of a peaceful co-existence. We'll appreciate the interspecies exchange with one another and become sensitive for each other's wellbeing and needs.

The master programme (architecture track) gains me a deeper understanding and teaches me many extraordinary examples of how architecture can contribute new approaches beyond the idea of the "architect as a technical artist". Indeed, we were encouraged to find precise and practical solutions for an abstract and wide range of topics.

Architecture reacts to ongoing changes and needs in society. Indeed, it can bring different groups together and create spaces of encounter, especially for the unrepresented and overseen ones. One aim of the Graduation Studio in the Chair of Methods of Analysis and imagination is present in its title indeed: Transdisciplinary Encounters. Towards Inclusive Built Environments in Belgrade. Architecture reacts to ongoing changes and needs in society.

As mentioned earlier, the project proposal finds itself situated in a meaningful area for Belgrade's identity-making. There is the bees' unknown scale- and which is not related to Belgrade in the first hand. Nevertheless, to make such design of encounter particular to the given context; Belgrade.

Summing up, I hope to develop an architectonic vocabulary to facilitate multi-species encounter. In doing so, I aim to make use of it in my future professional career. Likewise, the project contributes to the ongoing discussion about the complex interdependencies between nature for the city and vice versa: As architects, we can build such a scientific framework. As architect Junya Ishigami formulated it accurately when saying in the introduction of his book, Another scale of architecture: "To see architecture no longer as a shelter (only), but as the embodied environment itself."¹

¹ Junya Ishigami: Another Scale of Architecture. 2010, Tokyo. Introductionp. 12

PART ONE

Collect

$: SEME^* :$

Introduction. *The seed.

Problématique: How will we life together?¹

Belgrade is a city in the Balkan peninsula and has hosted different Empires through the centuries which formed a vivid cultural heritage. When thinking about a possible future identity, the city must cope with its complex history, present memories alive in the city and a range of different narratives that interweave with selfsame.

Nevertheless, looking for a physical presence of Belgrade's vivid past, the Kalemegdan fortress, on the confluence of the river Sava and Danube, embodies such agglomeration. It was for centuries that Belgrade's population was concentrated only within the fortress walls. Thus, until most recent times, the fortress's history reflects on the history of Belgrade itself. Located in Belgrade's municipality of Stari Grad, it is the oldest section in the urban tissue and symbolic its core. Nowadays the fortress enfolds several parts with new programs. However, next to the old citadel with the Upper- and Lower- Town, further use such as the Kalemegdan park, public sports facilities and Belgrade Zoo (Garden of Good Hope) evolved.

Besides these city-specific attributes, Belgrade's artificial environment has- as for every big city- grown to an enormous extent. Therefore, the boundary between natural and artificial, these contradictions, has frown ever-expanding. However, as every large city witnesses climate change and its aftermaths, they can no longer afford to antagonise and keep nature out.

How can a possible narrative envision ,Co-habitation in balance 'and support the process of forming alternative scenarios for Belgrade's future?

Zoos have always reflected the current relation of humans with flora and fauna. In doing so, the Belgrade Zoo needs a

1 Cf. Bienale 2020, title

rethinking of its initial function. Partly situated in the fortress's heritage, it can become a prime example in the city for a multi-species encounter: At this point, one between humans and bees.

Hypothesis: "To see architecture not longer as a shelter, but as embodied environment itself"²

We build houses and we create products that are designed to withstand the forces of nature, but as we are witnessing climate change, we can no longer afford to keep nature out. What if instead of growth and development as starting point of creation, we took erosion and decay as methods in thinking through nature? For example: What if instead of newness, ageing and decay one finds in nature became highly covetable?

What if we looked at the world from the perspective of "small world/scale thinking? Fundamentally re-thinking the methods of constructing architecture. In doing so, one can discover and expansive new world of another scale, not perceived before. The scale of spaces engenders by the natural environment. The liberating feeling of landscape, the vastness of the sky, lightness of a flower-leaf, the fineness of a raindrop. Architecture has been formulated as a shelter?!? In order to separate us from the natural environment (small shelter space built within that vast environment.

Today, however, we can no longer draw a line between the natural environment and artificial environment, our conception of architecture. This artificial environment has grown in an enormous extent. As the boundary between these contradictory standing environments, natural and artificial, has grown steadily more ambiguous, a new environment is taking shape.

The following research questions defined our group-research were (Having in mind the goals offered by the studio- meaningfulness, appropriation, inclusion): What way affect the New Cemetery, a walled presence in the

urban fabric, and Belgrade each other when reconsidering their relation as a given dichotomy of 'the living' (city) and *'the world of the dead' (cemetery)?*

Research Question: Thinking through Belgrade's Nature.

- What are the material conditions that allow a collective frame for the performance of individual actions of care (gestures) and visitors' interaction with the world of the dead?
- How do memories and narratives participate in the process of forming a city's identity? Is there a tangible presence of memories and narratives about the city, represented on a small scale?

During our precedent- study (Kalemegdan fortress, precisely the moats), the research questions were:

- Considering the moats' ongoing transformation process from their initial function as a defence mechanism to public space: What relevance have the wall and the moat for the fortress nowadays?
- When reconsidering the commonly used architectural language and tools: What kind of materials and conditions are needed to initiate a sensitive typological transformation of the historic moats?
- When studying the new program (here, basketball): What are the formal and informal affordances to create a public *space of encounter?*
- Which new typological function have single elements since the reprogramming? What kind of materialised patterns

are visible, and how do they adapt to the historical context?

For the design of the apiary in the moats of Belgrade zoo, precisely a garden for bees and humans, the following questions arise:

- Over the centuries the moats faced an ongoing transformation from a space of defence to encounter: Which architectural and non-architectural elements in the fortress *and closeby nurture nature are significant for the design?*
- Reading the fortress as an embodied environment of the city, it reflects selfsame through the ages: Which forecasts can we assume from changes in the fortress for Belgrade's future?
- What kind of new image of architecture evolves when we expand the canon of scales in architecture? Does such an extension of the architectural canon also approach a multi-species encounter, where the visitor (humans) is neither superior nor inferior to other organisms or life forms (bees)?
- What if honeybees know how to live well? Can they teach us how to take care of Is there something we could learn from the apiculture in Belgrade? For example, can we diversify a future world of encounter into a sharing sweetness with our fellows, the metaphorical sweetness of snacking nectar? Can pollinators and insects teach us gentle re-use of damaged, post-war landscapes (-as taken place a few years ago with beekeepers and mined land in Bosnia-)?

² Junya Ishigami: Another Scale of Architecture. 2010, Tokyo. Introductionp. 12

PART TWO



Scale

Visibilitv

: PUBOLJAK* :

Theory. * The flower bud.

Methods and Methodology: Another scale of architecture.¹

I. Group work

The fact that it is currently not possible to visit Belgrade also affected the research methods in use. Thus, the online-material investigation is the norm and an essential stepstone. On the other hand, one's imagination and perception gain importance, too. Therefore, the New Cemetery research allows thinking out of the scope and developing other methods that otherwise might stay out; as Giovanni Battista Piranesi shows in his painting the Campo Marzio dell' Antica Roma² his very own version of the antique campus. Indeed Piranesi has undoubtedly studied historical documents- yet we see the place "through his inner eye", thus, his perception. Under this directive, each week of research equates with one specifically selected painting as allegorical synopsis of the outcome. Besides, recreating sceneries from street-view images (model: Flowerkiosk) and then re-narrate a story behind, giving the story a title, was another type of imagination. A second task through the weeks is to create an image of Belgrade and the New Cemetery ourselves and later reading the relation of the two dichotomies (at first). Whilst "painting" such figure, the notion of love in architecture -as introduced by Alberto Perez Gomez³ - opens the to study how the performance of human actions of care transforms the inherent meaning of the material into a visible trace of care and therefore, human love.

Summing up, the main research methods we use during our group work aim to depict the interweaving narratives and

1 Cf.: Junva Ishigami: Another scale of architecture. 2010. Title Giovania B. Piranesi: Campo Marzia dell'Anticcute Roma. Painting. Rome, 1762
 Alberto Perez-Goméz: Built Upon Love. Massachussets. 2016

memories present in the city and the New Cemetery. The studio structure itself divides the group analysis into three parts. Nevertheless, these parts are not strictly separated, and neither are the applied methods and methodologies-the conceptual analysis is primarily specialised on semiology and praxeology. For the context, ontology, phenomenology and typology are subject headings. In the end, the disciplinary analyses are mainly material ecology and typology present.

Synopses:

• Epistemes: Ontology- phenomenology; typology, material ecology, typology

• Key terms, concepts, theories: Alberto Perez Gomez, Daoism (symbols), the concept of love in architecture, memory studies

II. Precedent studies

The Kalemegdan Fortress, the object of precedent studies, is one of the main attractions in Belgrade. However, there is a range of historical documents, especially maps from the different emperors, available online. Nonetheless, the depicted pieces of information about the current state of the architecture, including personal experiences, are often repetitive and focus instead merely on attracting tourists.

However, some websites deviate that this fortress is also a place for the Belgrade people themselves. For instance, with google maps, little videos uploaded by visitors and researching on the sports clubs' website, one can accrue an image through the 20th century up to present days. site of intervention first hand.

In conclusion, there is not one mainline for this part of the analysis. However- to opt a categorisation- typology, semiology, material culture and phenomenology are the main inquiry lines.

Synopses:

• Epistemes: Typology- material culture; phenomenology; semiology

• Key terms, concepts, theories: Transformation of cultural heritage

III. Design proposal

When an architect designs the first time for another species (precisely, multi-species), and, in doing so, thinking in a yet unknown scale; then it requires an amplified toolbox to approach. Even more, when it is not possible to explore the site of intervention first hand.

The project-specific research aims to address the agencies, performances and affordances for spaces of human-animal encounter (praxeology). With good cause, the beginning of the upcoming semester dedicates to learn more about the scale of insects, pollinators and especially bees in a first-hand experience (therefor, entomology). An interview with a beekeeper, a visit of the hives, and the honeymaking process is already scheduled. However, the production part will take place at a later point of the year, of course. Another "contact" person is a landscape gardener who can know the site-specific conditions, the suiting plants and the climate. On top, such personal contact with bees provides insight into (a personal-) user experience (ecology) when the two groups come into contact (phenomenology). Another topic is the epistemological research of



the transversion and emergence of different scales and hence, to develop a new typological "vocabulary" for such trans-human architecture (material culture, morphology). For example, currently, the moat is separated in compartments, therefore: a multi-polarity. However, the proposal is to determine a new focus on activities within a walking-route and create one site for the moats and the bailey. Hence, to scan the visual and physical permeability of the site.

Synopses:

• Epistemes: Ecology- praxeology- entomology- phenomenolo*gy; material culture, morphology*

• Key terms, concepts, theories: Alberto Perez Gomez, Daoism (symbols), the concept of love in architecture



PART THREE



: PROCVETATI* :

Application. * The *flower blossom*.

Preliminary conclusions: "One for me, one for you."

"The human need for shelter is permanent. Architecture has never had fallow periods. Its history is longer than that of any other art, and its effect ought to be recognised in any attempt to account for the relationship of the masses to the work of art. Buildings are received in a twofold manner: by use and by perception. Or, better: tactilely and optically."2

If the research about Belgrade is a postcard- it will map a city that is alive through its citizens and their spaces of encounter. Be it cemeteries or a basketball field- Such animated image portrays people gathering together in the very presence of a moment, keeping in touch- in the physical sense of the word (sports activities- fortress)-, at times by remembering their ancestors and sometimes by only leaving a discrete message for the next visitor to come (leaving a trace/ performing gestures of care- cemeteries).

Such city-live affords the actors performing no less than the stages to enable a rencounter and respectively face-to-face encounter. Conceiving an architectural design for such an environment- figuratively speaking: giving it a presence by interweaving it in Belgrade's vivid fabric- that is the task for the upcoming semester.

The future design combines two approaches of 'design-encounter' one can say: On the one hand, there is the historical and future relevance of the site itself. On the other hand, the (generic) approach to design for humans and bees. At first glance, it is a program that could merely be taken place at any other setting and either way in different expanding town. On that account, it is crucial to synergise both of them and make them precise to the site. If done well, the project can give a specific

example of a broad topic that regards us all and is even more in the face of forming an identity for Belgrade's future; namely protecting the environment. Not by chance, that the chosen site, the fortress, emblematises Belgrade's internal mirror image. Hence, it is anodyne divination to see the zoo's name, 'garden of good hope' as a forebode for Belgrade's near future. Such projection in the face of a pandemic crisis in which cities allocates themselves to a "fetching back" nature and personal contact becomes a rare commodity.

"Half for me and half for you"³ is Hatidze's mantra, which she repeats as she tends to the bees on the mountain. "Sharing with bees and with nature is the key to her survival," says Stefanov, the producer of the film Honeyland, a film about the life of the Macedonian Beekeeper Hatidze. Furthermore, the film emphasises the deficiency of balance in a modern world.

Serbia has rich apiculture, which derives from the good natural condition, the reichniss of plant life s and the moderate continental climate. In fact there ase approximately 30.000 beekeepers in Serbia (2020)4. Bees are a kin-based society, and they work cooperatively for the sake of their hive. Perhaps we should think about the Balkan folk idea of humans and bees have something vital in common: They are alike in facing death. The word uginuti means "to die "; but Slavic language uses only for animals. However, umreti translates the same but for people merely. And bees... Keeping this in mind, it is not an extraordinary fact that some Serbians keep faith that a humans soul of deceased transitions into a bee, that they share the same soul-an idea, still present in Aesopian fables. "Like Laudomia, every city has at its side another city whose inhabitants are called by the same names: it is the Laudomia of the dead, the cemetery. [...]

3 Ebid. Land of Honey 4 Serbian Beekeeping, Web-source. Accessed 08 December 2020, https://pcela.rs/IndexE.htm.

"Like Laudomia, every city has at its side another city whose inhabitants are called by the same names: it is the Laudomia of the dead, the cemetery. [...]

And to feel sure of itself, the living Laudomia has to seek in the Laudomia of the dead the explanation of itself, even at the risk of finding more there, or less [...]."¹

It seems that Italo Calvino describes Laudomia as another "city in the city". However, through the research, we created our own image for Belgrade's cemeteries: "Belgrade and the New Cemetery are interwoven. So tight, you almost oversee. Long threads span over the city and beyond. Small knots are tied together with care and form a discrete net throughout the city. Silent yet visible, such thin web forms a loving motif into the stone tapestry of the cemetery. Delicate yet consistent, each thread leaves a trace into the fabric, renewing the vivid tones of the tapestry day by day."2

It is simpleto draw a line between the narrative of these two worlds and the narrative of mulit-species encounter. Yet, such encounter needs other architecture. To do so, I aim to develop a manifesto: In doing so, architecture and nurture nature develop a symbiotic relationship instead of separating us (shelter).

As mentioned earlier, all kind of scales is present in the environment surrounding us. When we expand our vocabulary, then we can work with new scales. "Architecture thus created will melt into the new environment now emerging and, simultaneously, give form to a new environment. That new environment- = architecture. This is another scale of architecture; the new image of architecture."3

Transformation process if the moats- from space of defence to a space of encounter: The new pollinator area in Belgrade Zoo, specifically a bee-apiary, aims to introduce new nuances to the visitors: To shift the human-centred perspective by highlighting overlooked species from the earth and a yet neglected scale a more comprehensible way. Therefore, the design enhances the spatial intersections between humans and bees- beyond synanthropic conditions. Furthermore, the design proposal aims to prove possible, small-scale scenarios for multi-species design in the city altogether. Thus, to stimulate envisioning possible future scenarios for Belgrade and fulfil the upcoming agenda of an inclusive, sustainable environment.

Manifesto (current state):

1. critical : production

Envisioning a food-system in balance with a critical on human*centred production only.*

2. living : systems

Providing living environments for more than one species and further, benefits multi-species. The ongoing growth in human population and resource consumption is changing the planet in fundamental ways. One consequence is the loss of biodiversity. Cities depends on biodiversity in myriad ways, yet speciesare being rapidly lost tue to human activities.

3. non : supreme

2 Cf. A. Ferrarini, S. VanDePol, L. Kronmüller: Research Booklet, Chair of Methods of Analysis & Imagi-

Humans are not superior; neither is any species: An anthrodecentrism.⁴

No hierarchies or sumpremacies. Humans are dependet on pollinators and other sopcies.

4. multi : supreme

"No single life-form or member of one species alone could ever colonise space."⁵

Choices and Design Strategies: Another kind of paradise: The new garden of good hope

Zoos reflect our relation with flora and fauna: From the animal garden (1600, Baroque), to exotic worlds (Colonial period) up to own building typologies (Modernism), merged and influenced by theatre(s.ecieries, prison, circus... Nowadays, zoos work with amorph constructions to imatate the natural environment of the animal. Sotosay, it is more of a no-architecture an reconstrtion thatn architectural. Besides, spatial borders, fencese disapeeared and are replaced by ditsches and water as spatial barrier insted of cars. Nevertheless, the harmony of animal and nature is often an illusion. The zoo in Belgrade (founded: 1938) uses parts of the hitoc moats for their predators. In 2007, a man felt in the cage and was killed by two bears. TTo conceive an architecture of intersection and encounter for multi-species, the architecture provided by nature is an essential study object:

For the upcoming design period the following natural organic shapes and texture from nature are a first try-out list to approach and can be extended through the process: Floating (cloud) - Height (sky) - Movement (insects) - Space (flower field) - Commons (animal colonies). Furthermore, the context of the moat provides a range of elements that are essential in architecture and which have a deeper meaning embodied: Wall – Gate – Path – Garden – Nature

Creating a space to encounter the garden of good hope inspires to reflect on the term paradise as enclosed space of encounter (on earth) and nature in balance:Most European cultures translate the term paradise with garden, deriving from the Greek paradeisos, Latin paradisus . In the Persian version, however it has more of a cultural value and translates as two words: around and enclosure. 'Daeza' also has another root in the Indo-Iranian verb 'dhaizh' that originally means 'to construct out of earth', and the noun 'dhaizha', 'that which has been built out of earth'. This definition implies on the presence of the 'wall' constructed out of earth; a fortified space surrounded by formidable walls.

Athanasius Kircher illustrates paradise as an enclosed (walled) garden with four gates between two rivers. Such design results into an architecture that combines landscape design, as well as the devopment of a furniture (a public living room).

¹ Land of Honey (2019) - IMDb, accessed 31 Decembery 2020, https://m.imdb.com/title/tt8991268/. 2 Walter Benjamin, The Work of Art in the Age of Its Technological Reproducibility, and Other Writings on Media, trans. Edmund Jephcott, Rodney Livingstone, and Howard Eiland (Cambridge, Mass: Harvard University Press, 2008), P.40

¹ Italo Calvino: 'Invisible Cities (1978. A Harvest/Hbj Book). Chapter Laudomia. P.35

nation. 2020. Chapter cemeteries et seq. 3 Cff. Cf.: Junya Ishigami: Another scale of architecture. 2010. Introction, p. 10 et seq.

⁴ CFP: "Anthrodecentrism: Humans as Footnotes in Time and Space", Edinburgh Environmental Humanities Network (blog), accessed 8 January 2021, http://www.environmentalhumanities.ed.ac.

uk/?event=cfp-anthrodecentrism-humans-footnotes-time-space.

⁵ Lynn Margulis and Dorian Sagan; Dazzle Gradually: Reflections on the Nature of Nature, 2007.

(ONGOING DESIGN PROCESS)

DESIGN PROPOSAL

Apiarium: A garden for bees and humans in the fortress of Belgrade.*

"Home Sweet Home": A sequence of 3-4 intimate yet open spaces, open-air rooms designed both as a metaphor for domestic life and the zoo's (secret, hidden) paradise garden and extension of its exhibition space

The "basic" program is the Apiarium (Pcelinjak) (/APIÁRIUM/ I Subject (lat.). An Apiary (also known as a bee yard) is a location where beehives of honey bees are kept. Apiaries come in many sizes and can be rural or urban depending on the honey production operation. Furthermore, an apiary may refer to a hobbyist's hives or those used for commercial or educational usage. An Apiarium is a research & public engagement facility which seeks to support the reintroduction of Belgrade's native pollinator; The Bee. A series of buildings/ programmes and gardens offering research facilities, reception, shop and café, and exhibition area.

* Red outline: Fortress Thick red line: New Apiarium







Top: Siteplan of the moat (red) with zoo in the east and fortress in the west. M 1:1000







Top: Long Section West. M 1:000 'Direction Fortress' Top: Long Section East. M 1:1000 'Direction Zoo'





Top: Short Section From South. M 1:1000 Fortress on the left side. Top: Short Section From North. M 1:1000 Zoo on the left side.





Short Sections & Elevations 'Through the moat'. M 1: 750



Long Section 'View to the zoo'. M 1:750







WUNDERKAMMER : BELGRADE :

Research Diagram

Research Olaf Worm knew already during his lifetime, that it is essential to story one's findings carefully; He collected all his scurile findings from his travels in a special room, a Wunderkammer (German for: Wonderchamber).

Five Steps

Keeping each step of research in mind is sometimes difficult when one has done many notes during a semester. Especially, when is is not possible to travel and therefore also no way to collect "souvenirs" directly. For this reason this research diagram shows five steps how the previous research is given shape and will not be forgotten, but safely stored in a shelf. Of course, it is always possible to memorise or there is pleny of boxes left to add new object of interest in the upcoming months.

How to Tidy Up Research

Fig. 01, left) Wunderkammer. Museum Wormiannium of Ol Wormius. 17.th Century, Painting by Ole Worm.



Chair of Methods of Analysis & Imagination GraduationStudio



ORDER

- Typlogy Material Ecology
Phenomenology Anthropology History

Fig. 02, above) Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut .

2. HOW TO COLLECT



Fig. 01) Weekly research and collecting extraordinary findings. In order from week 01-16. To be continued after p2-p5.5.

Fig. 02) A mottley crew of objects and line of thoughts...

TIDY UP



				Flower food			Form studies		
	Belgrade	Anthropocene		riower tood			Form studies		
						Gestures & Traces	Animal Encounter		Flower Collection
				Materialised Care				Flower Kiosk Model	
						Painting (s)			
Memory/ Time- Scheme									Fortress moats
		Apiary						Honey Production	
			Cemeteries				Cemetery sections		
			Flowers & Stones		Flower Kiosk Model				
		Animal Encounter							
				Basketball					



EXHIBIT



SELF

ASSESSMENT

Description of Semester

The past studio semester was structured in three parts: At first, researching with two other students together; at a later point we reduced to work with one other person; And finally, on one's own design. This helped me not only to find my own line of inquiry, but also to reconsider my one position. Especially, since every group had their own "character", including strenghts and weaknesses...

The first part was accompanied by the lecture series and workshops provided by the research course. It was helpful to get an introduction into research (design), learn "vocabulary" (namely, the precise meaning of terms) and gain insights from other chairs.

My only critique point is that we could only chose for one workshop. It can be nice to profit from other chairs, with a different approach in an extra session. For example, from the history chair could be a good addiction since the Graduation Studio was already beforehand focusing on some aspects. Also the lecture given by Andrej Radman from the Theory Chair (How to build a phas space?) brought up philosophical questions which can be a helpful tool when it comes to, sensible yet complex task such as memory- making. Thus, my group was dealing with cemeteries, therefore we always had to balance between the thin line of intrusive and generic questions.



Critical Reflection

Drawing information from the feedback of others about my research, I am pleased that my topic seems to be relevant for other as well. There are a few other points on which I aim to work the upcoming semester. Merely, srtucture and tighten my research and design from the very beginning.

Overall I am pleased with my achievements through the past months. Indeed, it was sometimes difficult to miss the reflection and the exchange with other students or to get inspired by their works. However, overall I am very pleased with the.

I also enjoyed the freedom to explore. However, for the upcoming Semester I wish to strenghten my "skills" to work with a clear goal. Precisely, to deliver on point of design more straight when needed. However, I assume this intricacy is rather based on personal experience through the pandemic than my impression of progess in the studio in general. Therefore adressed to myself merely.

Linda Kronmüller



Bibliography

LITERATURE

ESSAYS/ WEBSITES

SOURCES: ALPHABETICALLY LISTED.

- More Than Honey
- Antonelli, Paola, Neri Oxman, Jennifer Dunlop Fletcher, Joi Ito, and Heather Davis. Neri Oxman: Mediated Matter. 1. Edition. New York: Museum of Modern Art, 2020.
- Benjamin, Walter. The Arcades Project. Translated by Howard Eiland and Kevin McLaughlin. Third Printing. Cambridge, Mass.: Belknap Press: An Imprint of Harvard University Press, 2002.
- Edinburgh Environmental Humanities Network. 'CFP: "Anthrodecentrism: Humans as Footnotes in Time and Space". Accessed 8 January 2021. http://www.environmentalhumanities.ed.ac. uk/?event=cfp-anthrodecentrism-humans-footnotes-time-space.
- Italo Calvino: 'Invisible Cities (A Harvest/Hbj Book. unknown. (pdf)
- Descola, Philippe, and Marshall Sahlins. Beyond *Nature and Culture*. Translated by Janet Lloyd. Reprint Edition. Chicago London: University of Chicago Press, 2014.
- Gallese, Vittorio, Juhani Pallasmaa, Harry Mallgrave, and Sarah Robinson. Architecture and Empathy, 2015. Helsinki, 2015.
- Gimbutas, Marija. The Goddesses and Gods of Old Europe: Myths and Cult Images. University of California Press, 2007.
- Grassi, Ernesto, Jakob von Uexküll, Georg Kriszat, and Adolf Portmann. Streifzüge durch die Umwelten von Tieren und Menschen - Ein Bilderbuch unsichtbarer Welten. Bedeutungslehre. [1.-40. Tsd.] Edition. Rowohlt, 1956.
- 'Junya Ishigami Another Scale of Architecture: Tokyo, 2010.
- 'Land Des Honigs (2019) IMDb'. Accessed 4 January 2021.

FILMS

Mihailovic, Zoran, Slobodan Savic, Irina Damjanjuk, Aleksandar Stanojevic, and Miroslav Milosevic. 'A Case of a Fatal Himalayan Black Bear Attack in the Zoo'. Journal of Forensic Sciences 56, no. 3 (May 2011): 806-9. https://doi.org/10.1111/ j.1556-4029.2011.01721.x.

Pérez-Gómez, Alberto. Built upon Love (MIT Press): Architectural Longing after Ethics and Aesthetics. Cambridge, Mass. London: MIT Press, 2008.

Semper, Gottfried. Style in the Technical and Tectonic Arts; Or, Practical Aesthetics. Los Angeles: Getty Trust Publications, 2006.

'Serbian Beekeeping'. Accessed 8 January 2021. https://pcela.rs/IndexE.htm.

'The City as a Project | Paradise'. Accessed 8 January 2021. http://thecityasaproject.org/2011/07/ paradise/.

Von Uexküll, Jakob. 'A Stroll through the Worlds of Animals and Men: A Picture Book of Invisible Worlds'. Semiotica 89, no. 4 (1992).

Nutshelltimes.com/ Belgrade-zoo https://www.beozoovrt.rs/

Appendix A : List of Figures

INTRODUCTION

- 'Aspidium Filix by Karl Blossfeldt on • Fig. 01 Artnet'. Accessed 8 January 2021. http://www. artnet.com/artists/karl-blossfeldt/aspidium-filix.
- 'Wenzel Peter, Adam and Eve in Fig. 02 • Paradise.'. Accessed 8 January 2021. http:// www.museivaticani.va/content/museivaticani/de/collezioni/musei/la-pinacoteca/ sala-xvi---secolo-xix/wenzel-peter--adamo-ed-eva-nel-paradiso-terrestre.html.
- Fig. 03 My Forever Travel. 'Serbian 18th and 19th Century Painting - National Museum Belgrade', 5 August 2020. https://myforevertravel.com/national-museum-belgra-

APPLICATION

Götzfried Antique Maps. 'Belgra-• Fig. 04 dum Sive Alba Graece, Serviae Metropolis Ubi Savus Fluvius Danubio Misc... /, 1760'. Accessed 8 January 2021. https://www.vintage-maps. com/en/antique-maps/europe/balkan/seutterbalkan-serbia-belgrade-beograd-1760::11486.

ILLUSTRATIONS

- Dimensions.Com'. // Pinterest.com // tokyo-zoo. net // Usm.com
- 'Festung von Belgrad Google Maps'. Accessed 8 January 2021. https://www.google.com/maps

RESEARCH DIAGRAM

'Wunderkammer'. In Wikipedia, 7 Ja-• Fig. 05 nuary 2021. https://de.wikipedia.org/w/index. php?title=Wunderkammer&oldid=207375861.

BIBLIOGRAPHY

- "Primavera (Botticelli)". In Wi-• Fig. 06 kipedia, 20 December 2020. https://en.wikipedia.org/w/index.php?title=Primavera_(Botticelli)&oldid=995253185. de-serbian-18th-and-19th-century-painting/.
- "Primavera (Botticelli)". In Wi-Fig. 07 kipedia, 20 December 2020. https://en.wikipedia.org/w/index.php?title=Primavera_(Botticelli)&oldid=995253185. de-serbian-18th-and-19th-century-painting/.

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