HYBRID INFRASTRUCTURES

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AN URBAN DESIGN RESEARCH STUDIO AT FLOATING UNIVERSITY TUB / SOSE 2023

INTRODUCTION

When thinking about urban infrastructure, we tend to think about essential facilities that make cities livable, such as roads, sewage, or power supplies. Ever present yet overlooked, these are systems that are typically only noticed when they break down: power cuts, water shortages, roadblocks. Some of these infrastructural facilities were built decades ago as monofunctional entities that serve one particular purpose and, as a result, exist today as isolated and enclosed chunks of space within the urban fabric. They are planned by the state, built and managed by expert technicians, and are largely inaccessible to the public.

Today, urban infrastructures have become complex and messy. They can be seen as much more than just old pipes, cables, and containers. Urban infrastructures are deeply entangled with the landscape and the biodiversity of the environment in which they intervene. This entanglement is further complicated by the fact that urban infrastructures are traditionally sites of expertise. These infrastructures appear difficult to read and, as a result, impossible to alter.

But what happens when an urban infrastructural space is opened up, its function hybridized and its use collectivized? What protocols, routines, schedules and choices manifest when an urban infrastructure is infused with care: softened and layered with diverse meanings? Can these new circumstances transform urban infrastructures into spaces for commoning and stages for public debates?

FLOATING UNIVERSITY(1)

The site was designed in the early 1930s as a rainwater retention basin to serve the Tempelhof airfield and adjacent avenues, and it was encased in concrete after the Second World War by the US Army. Today, it remains as a fully functioning water infrastructure, holding and diverting rainwater into the city's canal system. From the time of its construction in 1930 to its activation in 2018 by architecture group raumlabor, the basin was closed off to the public. Yet over the course of its many secluded decades, a diverse range of animals, plants, and algae took root and gave birth to a unique landscape: a man-made environment reclaimed by nature, forming a third landscape (Clément), or a natureculture (Haraway). Since its opening, the site provides a place for the artistic, pedagogical, cultural and spatial exploration of more-than-human cohabitations.

In 2020 plans were disclosed by the landlord Tempelhof Projekt GmbH to transform the site. This means the environment enjoyed by the life forms currently occupying the site will be dramatically altered. The thick concrete floor will most likely be removed and replaced with a porous layer to allow incoming polluted rainwater to filter and trickle into the ground. This kind of spatial transformation is already deeply affecting both the biodiversity onsite and the cultural and educational programming, but the process is still open and has the potential to be collaboratively defined. Could the re- natural-izing process explore the relationship between urban nature and urban infrastructures by establishing a dialogue between artists, academics, engineers, gardeners, and technocrats to prototype different possible systems on site? Could this initiate a dialogue where artificial divisions between these forms of practice—artistic, academic, and scientific; civic and governmental—are dismantled?

(1) For more detailed information, please, refer to the article "Floating University: A Natureculture Learning Site" by Rosario Talevi, Gilly Karjevsky. (drive folder: on floating)





A. SITUATING, EXPLORING

FLOATING e.V.

The founding year of the Floating University saw a diverse breadth of visitors involved to varying degrees with the activity on site, creating a unique social and environmental ecosystem. Moreover, the program consolidated a network of practitioners who towards the end of 2018 decided to continue the experiment by transitioning from a "temporary" project into an association: Floating e.V.

Floating e.V. is registered as a non-profit with an elected board and monthly assemblies where all members have an equal voice. It is organized in working groups that work on specific tasks and topics driven by interest and desires – or what we also like to call Fields of Knowledge and Action: from maintaining and developing the site to gardening, cultivating collaborations and taking care of neighborhood connections The association mission is to open, maintain, and take care of this unique site while bringing non-disciplinary, radical, and collaborative programs to the public.

STUDIO

The urban design research studio takes on the site of Floating University - the rainwater retention basin serving Tempelhofer Feld - and the situation of Floating e.V. - an in-depth cohabitation between the constructed water infrastructure, its human culture and its other-than-human overlays.

Departing from the idea of learning as a form of living and responding to contemporary conversations about social and environmental justice as well as histories of alternative narratives for urban development the studio's point of convergence is the feminist approach to spatial practices. This approach is reflected in the emphasis on the very process of space-making and its collective nature over its finite form, as well as on the inclusion and recognition of the equally significant agency that all objects (buildings, infrastructures), people, and species have in the continuous co-creation, maintenance and reconfiguring of all material relations within the built environment.

Students are invited to engage with the site and its complex ecology while acknowledging that we are situated in relation, in cohabitation, with an infrastructural site and its many living forms. After an initial collective research phase, students develop their very own site-responsive projects: from small interventions, theoretical propositions to playful, imaginative spatial strategies in a variety of formats for this hybrid infrastructure at the heart of Berlin-Kreuzberg.

COURSE OUTLINE

A. Situating, Exploring

In this initial phase we i. situate the theory and ii. explore the complexity of the site. We develop a shared language by looking into concepts and terms that will be useful to scaffold the research and the upcoming project phase. And attemp to investigate, unveil and capture the agents, relations and controversies of a site that is comprised by a public water infrastructure (from the ex-tempelhof airport rooftop, to the retention pool to the city's wet infrastructure), a human culture acting upon/with/within/on the site (from the association, to the city government and everything in between) and the inter-species cohabitation (other-than-human worlds). Locating the diverse "things" without hierarchising - people, animals, plants, laws, events, chemical reactions, materials- while exploring their inter-relationship and inter-dependencies.

Invited Guests

- Mapping workshop with Arch. Ignacio Rivas (Finis Terrae, Chile/ Barlett, UCL, U.K.)

- How do architects and urbanists work with scientific data? Workshop with Katherine Ball (Portland State University/ Yale University, U.S.)

Studio Bibliography, Selected Readings

- Lowenhaupt Tsing, Anna. The Mushrooms at the End of the World: on the Possibility of Life in Capitalist Ruins. Princeton University Press, 2015. All pdf (Prologue, Chapter 1, Chapter 2)

- Krasny, Elke. "Architecture and Care." In Critical Care: Architecture for a Broken Planet, edited by Angelika Fitz and Elke Krasny. The MIT Press, 2019. Pages 33-41

- Escobar, Arturo. Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds. Duke University Press, 2018. Pages 25-48

Braidotti, Rosi; Hlavajova, Maria. Posthuman Glossary. Bloomsbury Academic, 2018.
Selected Terms:
<u>Anthropocene</u> by Jussi Parikka
<u>Capitalocene and Chthulucene</u> by Donna Haraway
<u>Commons</u> by Lindsay Grace Weber
<u>Multispecies</u> by Eben Kirksey
<u>Naturecultures</u> by Iris van der Tuin
<u>Planetary and Rewilding</u> by Maya and Reuben Fowkes

- Lewis, Sophie. Hybridity and the Cyborg. Brooklyn Institute for Social Research, Philadelphia, PA, United States, 2020

 Clément, Gilles. Manifesto of the Third Landscape. Series of New Imaginaries. TEH, 2004
Mortimer-Sandilands, Catriona. "The Marginal World". In: Every Grain of Sand: Canadian Perspectives on Ecology and Environment, edited by Andy Wainwright. Wilfrid Laurier University Press, 2004

B. Defining (your brief)

In this phase students focus on their specific area of interest, determine the scale and the format of their project. Do I want to design and build small interventions on site? Do I want to research a particular controversy more theoretically? Do I want to explore potential scenarios for the site?

C. Carrying out

Development of projects. Working on site at Floating or/and at the studio depending on each pro- posal. Students can collaborate in groups of sizes of up to 3-4 people per group.

D. Exhibiting

Preparing the projects for their final iteration, for exhibition. In this last phase we turn the attention to questions of display, representation and communication. Beyond exhibiting a "final" project, works should convey the different phases (process) along the semester.



STUDIO SCHEDULE - PHASES

STUDENTS PROJECTS (Selection)

Hydrocommons: Negotiating Ownership, Accessibility, Distribution and Care of Rainwater

Natureculture Test Sites

Shifting Perspectives: Re-thinking Paradigms of Decay

Hyperesthesia



HYDROCOMMONS Negotiating Ownership, Accessibility, Distribution and Care of Rainwater

Ariann Schwarz, Elena Valter, Michael Hindelang, Felix Frankowiak

link to full project

What if different stakeholders around the basin - allotment gardens, cemeteries, sports fields, *Wagenplatz*, Floating e.V. and the more-than-human - had access to its rainwater and made decisions on how it should be distributed? How would this process affect water consumption's habits and routines while shape the place otherwise?

This project considers water as a commons. It explores the possibility of detaching rainwater from the ground it falls on - and therefore challenges traditional ideas of land ownership and accessibility to shared resources in the midst of an ecological crisis. It proposes an assembly space where diverse forms of life convene to debate on water issues and a pedagogical device that speaks about interspecies cohabitation through their connection to water.





Wilde Möhre dacus carota



Echter Bergfenchel seseli montanum



Holland-Lauch allium aflatunense





Edeldistel eryngium planum



Taubenkropf-Leimkraut silene vulgaris



Zwergiris iris reticulata





Arkansas-Scheinaster

vernonia arkansana

Steppen-Wolfsmilch

Euphorbia seguieriana

ssp. niciciana

Strauß-Narzisse narcissus tazetta



NATURECULTURE TEST SITES

Vera Kellmann, Leo Merbold

link to full project

Natureculture Test Sites rethinks the future of the rainwater retention basin as an infiltration basin. It speculates with different climatic scenarios: "normal", drought or flash rains and how these affect the amount of water on site.

Besides proposing a new overall design for the site, it introduces five different experimental natureculture typologies: a permaculture edible garden - understood as a eco-social space where the growing, processing and eating of edible plants poses as an alternative to industrial farming methods; a remembrance space built as a gathering space to observe the ecological transformation of the "original" ground once the basin is unsealed; a botanical composition where the designers are the birds; a floating island that provides habitat for a diverse array of species (from frogs, to algae, to microorganisms) and a concrete island untouched by humans that records the passage of time.





SHIFTING PERSPECTIVES Re-thinking Paradigms of Decay

Jana Wechtenbruch, Clara Neuhold, Nora Stellwag

link to full project

This research project presents new perspectives around ideas of heritage and decay by emphasising the transformative potential of different kinds of matter. Through several case studies from across the planet - in urban and rural contexts- it explores material cycles by introducing novel ways of building with plantae (reeds, bamboo); composite (decay of concrete, stone restoration) and water (renaturalisation of a river bed, reclaiming groundwater as lake). It focuses not only on the projects' experimental approaches and responses to matter but also on their complex histories while paying special attention to the act of building as a socio-political practice.

Can a conventional approach towards decayed objects be unlearned? What if the environment is perceived as being in a state of flux rather than static? What if time is grasped not as a strict linear progression, but as a continuum where the past remains relevant and continuously shaping the present?





HYPERESTHESIA

Anna Thanh An Quach

link to full project

"Hyperesthesia" is an audio-visual exploration and investigation of the rainwater retention basin in Berlin- Kreuzberg. It explores the concept of hybridity within Floating University by exposing audiences to a sensitive experience of sound and texture. The project challenges the common notion of space and ecology, by adopting a perspective of 'zooming in and out'. It establishes a relationship between the human camera, the sound and texture, and varies the intensity of actors on site, further altering the frequency of experience.

Images and sound collected on site over numerous days, from dawn to dusk, further contributes to the construction of a complex image of Floating University by amplifying the sensorial experience. The project allows us to recognise that ecology is an intricate network, where each actor plays a distinctive role in shaping a living entity. The experience only captures a fraction of the forever-changing environment at Floating University.

























