ARCHITECTURE OF TERRITORY Concrete Utopias Fall 2023

Semester Programme



Building a Model for Zürich Nord

Colophon

Studio Series CONCRETE UTOPIAS

Fall Semester 2023

AGRITOPIA
Building a Model for Zürich Nord

CONCRETE UTOPIAS

Concrete Utopias (based on the notion of Konkrete Utopie by Ernst Bloch) is a studio series at Architecture of Territory dedicated to anticipatory, future-oriented and collective design projects exploring forms of building, territorial organisation and social reproduction based on social and environmental justice and equality, as alternative approaches addressing the manifold crises. The studio series is affiliated with the ETH EPFL MAS in Urban and Territorial Design. Citizens, experts, fellow designers and artists accompany us in the process.

ARCHITECTURE OF TERRITORY
Professor Milica Topalović

<u>Teaching Team</u>: Dorothee Hahn

Jakob Walter Jan Westerheide

Student Assistant: Martin Kohlberger

ETH Zurich D-ARCH ONA G41 Neunbrunnenstrasse 50 8050 Zurich, Switzerland

P +41(0)44 633 86 88 topalovic.arch.ethz.ch

Disclaimer:

This semester program reader is produced as the introduction to the research and design studio. This publication is meant solely for purposes of education. Its commercial distribution is, accordingly, strictly forbidden.

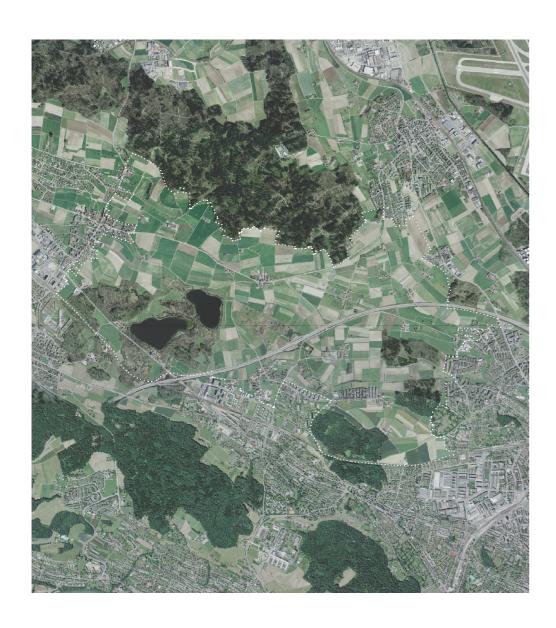


AGRITOPIA Building a Model for Zürich Nord

During the summer weeks we used to prepare this semester, apocalyptic news of forest fires, migrant tragedies, and war, dominated the media. The manifold crises of climate change, biodiversity loss and increasing social inequity have left many disillusioned, while others are demanding prolongation the status quo through solutionism and technofixes. Some say that we have settled into a "long defeat" in which there is no room for optimism left. As designers we are always oriented toward the future. But how to approach the future when our collective capacities to imagine and to act seem to be depleted?

We are therefore initiating a new studio series Concrete Utopias, based on the notion Konkrete Utopie by philosopher Ernst Bloch, where we return the notion of utopia—not as a mere fantasy, but as a concrete potentiality of change grounded in the real, socioeconomic and political conditions of a given context. Countless actions and initiatives have been realised as concrete utopias, showing potential for wider and far-reaching transformations based on democratic orientation and environmental agenda—like the Zone à défendre (ZAD) at Le Mormont, the Rote Fabrik in the city of Zurich, the Halen Estate by Atelier 5, the community project at Vrin, and community-based agriculture projects all around Switzerland. These and other examples have inspired shifts in the discourse and practice and led to positive change.

Our first concrete utopia will be an AGRITOPIA. We believe that the crisis of our imagination is reinforced by the separation of the urban and the rural in our culture. To imagine a different urban future for Zurich, we will therefore work on agricultural territories that lie at the city's edges. They form vital support to the city with water sources, clean air, various materials, land for food and energy production. Only by radically reimagining territorial organisation and land use practices in ways that are currently often disqualified as utopian and impossible, can we divert ongoing tendencies of agricultural intensification accompanied by soil degradation, water pollution and biodiversity loss. Designing sustainable biophysical relationships reflects in urban life itself, and will enable us to address issues of consumption, of commodification of land and labour, and even of housing crisis.



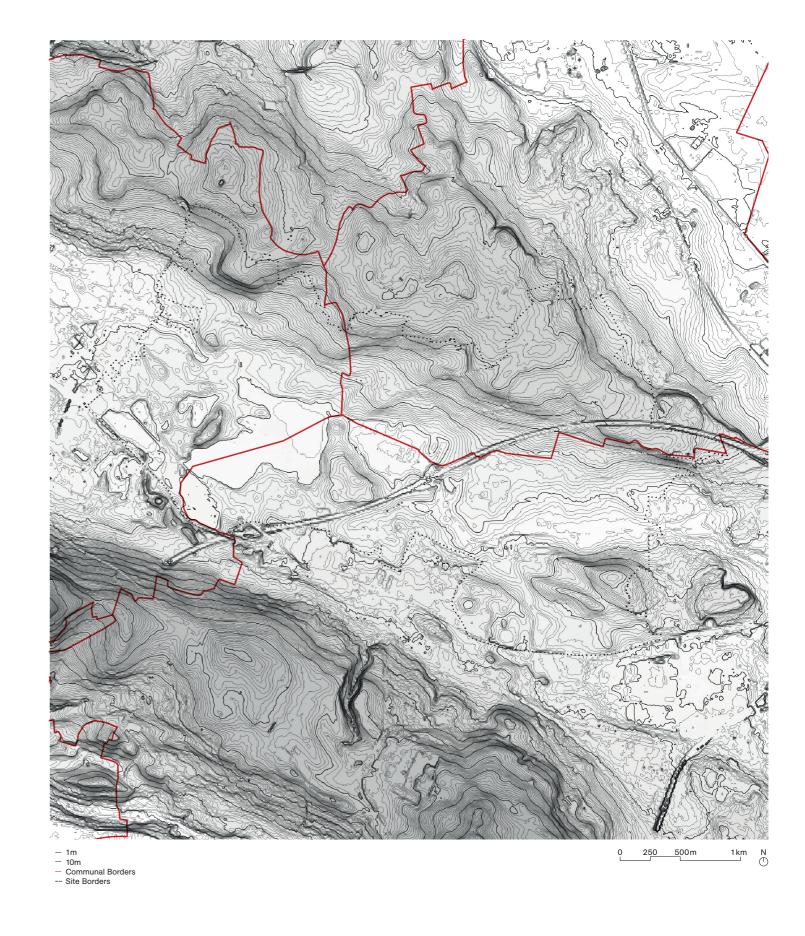
The place and time for AGRITOPIA are agricultural fields of Zürich Nord beyond 2050, in a world of future generations. A five-minute walk from our studio in Oerlikon toward the north, the view opens onto an agricultural landscape connecting the city of Zurich and the communes of Rümlang and Regensdorf, with Katzensee and its adjacent wetlands at its core. It constitutes the largest non-built area in the immediate vicinity of Zurich's centre, but without encompassing plans for its future use. Agricultural activities here vary from conventional farms, over organic farming, and communitysupported agriculture, to Switzerland's largest agricultural research facility Agroscope. In the studio, we will form groups to tackle specific topics and potentials of the site-from local food production and distribution, to future of agricultural work, the water and nature preservation, to cooperative organising and common ownership. We will develop a concrete agritopia based on close observation and analysis of the existing qualities of the landscape and the pioneering practices that make them possible.

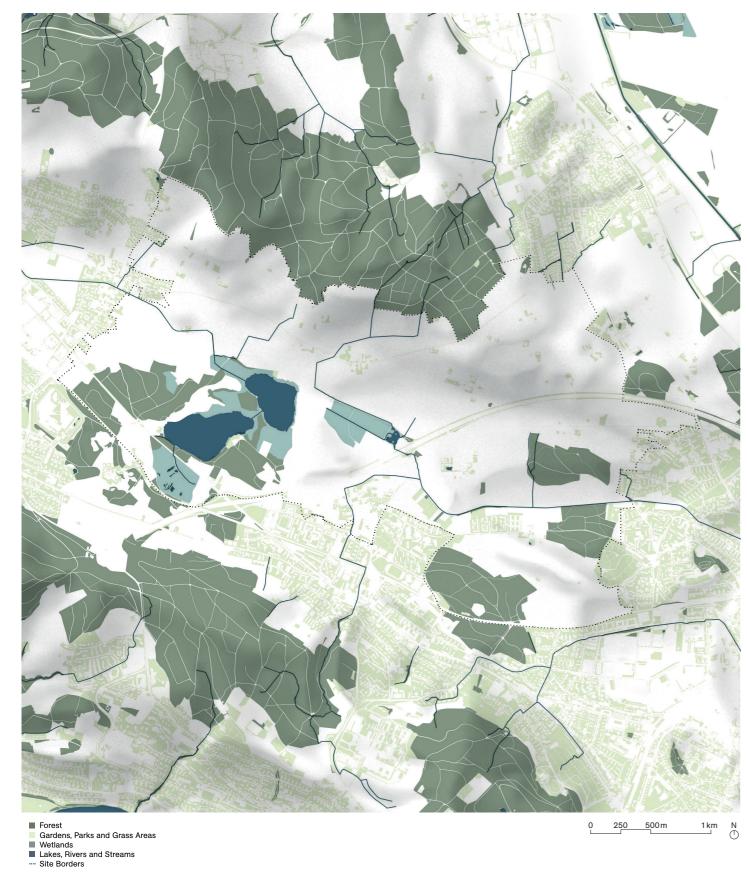
Large-scale models have been used, again and again, to negotiate and represent future visions of space and social organisation. Intuitive and suggestive, models prefigure a different reality and help imagine a possibility of moving from the here and now, to there and then. A large-scale model of the site in Zürich Nord (approx. 4x3m) will be the tool of our collective project—both our final result and our working tool throughout the semester. Our sparing partners in the process will be scientists, designers, policy makers, and farmers and activists currently working on site. We will work with diverse materials and techniques, and in a range of scales from 1:100 to 1: 2000, exploring and visualising relationships between human practice and the territory and negotiating scenarios with each other.

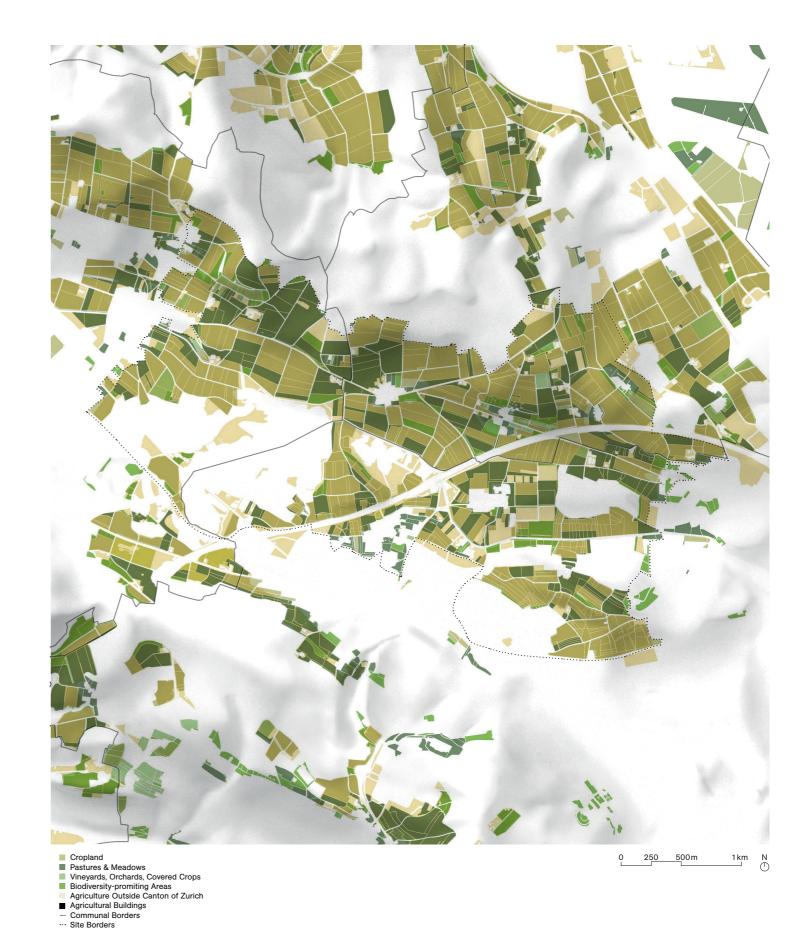
Content

0	Maps
14	Studio Timeline
16	Atlas of Zürich Nord Task, Formats and Submission
18	Designing Agritopia Tasks and Submissions Work Formats
22	Reading Sessions
24	Topics Croptopia Animal Farm Hydrotopia Cohabitopia Future Farms Future Farmers Foodtopia Future Movements
42	Teaching Environment & Assessment
44	Digital Resources
46	Server Structure
48	Contacts

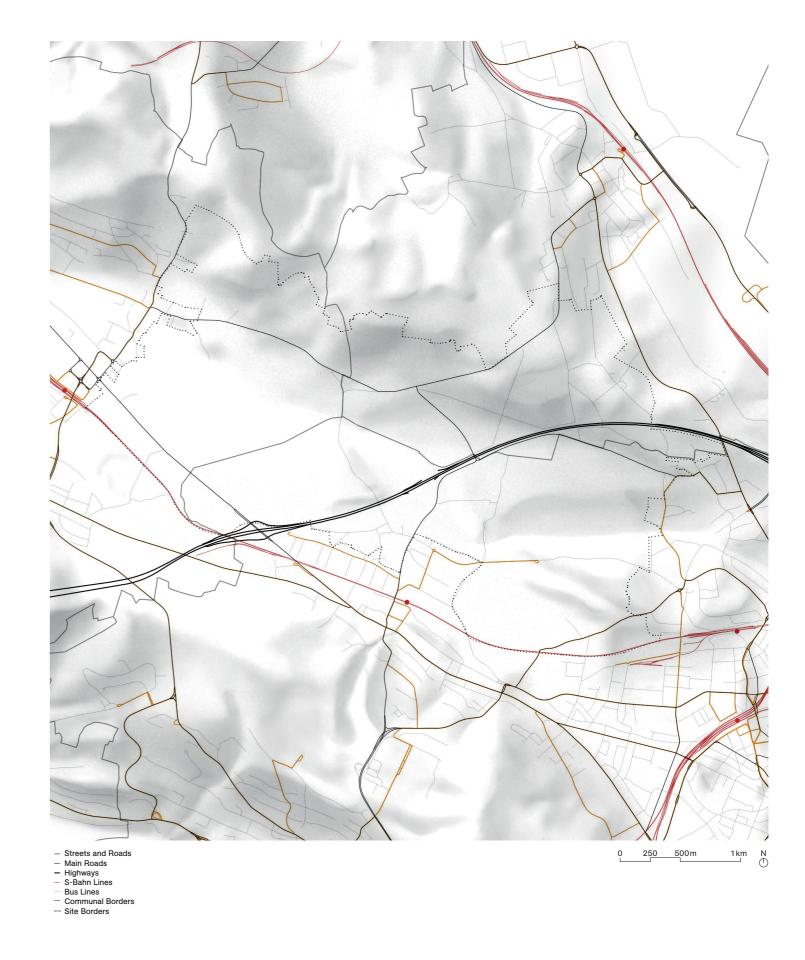












Studio Timeline

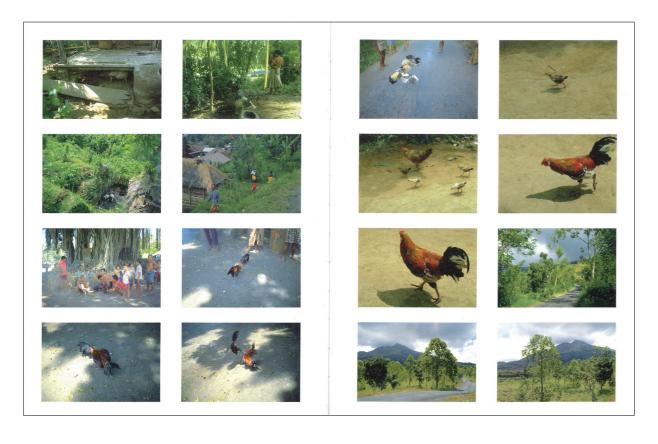
	WEEK CW38			EK 2 V39		EK 3 V40		EK 4 V41		EK 5 V42	WEEK 6 CW43	WE CV	EK 7 V44	WE CV	EK 8 V45		EK 9 V46	WEE CV	EK 10 V47	WEE CW	K 11 /48		EK 12 V49	WEE CW		WEE CW	E K 14 V51
TUE 19.9		WED 20.9	TUE 26.9	WED 27.9	TUE 3.10	WED 4.10	TUE 10.10	WED 11.10	TUE 17.10	WED 18.10		TUE 31.10	WED 1.11	TUE 7.11	WED 8.11	TUE 14.11	WED 15.11	TUE 21.11	WED 22.11	TUE 28.11	WED 29.11	TUE 5.12	WED 6.12	TUE 12.12	WED 13.12	TUE 19.12	WED 20.12
INTRO Walk thr Zürich I	ough Nord I	INPUT Studio Programme + First Task	READING SESSION I INPUT Website Desk Crits	INPUT Drawing Software Desk Crits	READING SESSION II Desk Crits	INPUT Graphic References Desk Crits	READING SESSION III Desk Crits	Desk Crits	ATLAS REVIEW	WORKSHOP Building the Model Base	SEMINAR WEEK (no studio)	SESSION		SESSION	COMMON SESSION Drafting a First Vision Desk Crits & Group Feedback	Desk Crits & Group Feedback EXPERT WORKSHOP (tbc)	Desk Crits & Group Feedback EXPERT WORKSHOP (tbc)	PROJECT REVIEW	Desk Crits & Group Feedback	Desk Crits & Group Feedback EXPERT WORKSHOP (tbc)	EXPERT WORKSHOP (tbc) Desk Crits & Group Feedback	Desk Crits	Desk Crits	Desk Crits	Desk Crits	FINAL REVIEW	

EXHIBITION OPENING Agrifutures, ZAZ

Atlas of Zürich Nord	Designing Agritopia							
	Building the Model Base		•					
	Drafting a First Vision							
		Creating a Common Project						

Reviews
Common Sessions
Reading Sessions
Workshops
Inputs
pert Workshops (tbc)

Atlas of Zürich Nord Task, Work Formats and Submission



Task Your task is to conduct a thorough research about one of eight given research topics (p. 24). You are asked to analyse and visualise the impact of your topic on our studio site in Zürich Nord. What does the recent historic development tell us about the present spatial configuration of the site? What are contemporary urgencies and problems that revolve around your topic? And what are possible projections of your topic into the future?

Each group is provided with with a selection of specific research questions, contacts, reference projects and texts to get you started. In order to engage deeply with the site and its actors, you are asked to conduct several extensive interviews with various contacts-farmers, experts, activists, pioneers or inhabitants. During your work you are asked to constantly reflect on your findings, reassemble your material, draw new conclusions and adjust your research questions. Your findings will be visualised and presented in during the review using the following work formats:

Work Formats

Site Map: Narrative Cartography

You are asked to compile and condense your research findings in one comprehensive territorial map of the site. You will portrait and visualise all essential aspects of your research topic on the site, using GIS and Vector mapping techniques. By highlighting, elaborating and creatively drawing certain aspects of your research in more detail, the map will become a tool of narrative cartography.

Photography: Visible World

During your field work, you are additionally asked to take the perspective of your research topic and observe the site under that premise. The output will be a photographic documentation in the form of a photo essay, using the format "Visible World" from Fischli and Weiss as a reference.

Slide Presentation

The slide presentation will help you to structure your oral presentation—it should always contain a qualitative title and subtitles. It can contain all sorts of mixed media, enabling you to visualise the interviews using video and audio recordings, and add supporting evidence, like historical documents and photos, diagrams, statistical representations, planning documents, architectural drawings, sketches, and more. You can find templates for for the slide presentation here:

2 RESOURCES > 1 TEMPLATES > 3 SLIDE PRESENTATION

Please submit all your work onto the server under 4_SUBMISSIONS

ATLAS REVIEW, Tue, 17 October

- Site map
- Visible World
- Oral presentation (15min)
- Online reportage

Designing Agritopia Tasks and Submissions



Tasks Building the Model Base

After the Atlas Review, we will come together for two weeks to discuss, plan and build the base structure of our large territorial model. Together, we will decide on the shape, extent and materiality of the model.

Drafting a First Vision

During that time, you are asked to come up with a first draft of your vision for a hopeful future of our site. This vision will be based upon your conclusions that you made during the Atlas Task and should focus exclusively on your chosen topic. You should allow yourselves to be radical and utopian and display your personal vision, rather than focusing on feasibility. You are asked to materialise your vision on the common territorial model, using materials of your choice, highlighting how and where you would make changes to the spatial configuration of the territory.

In two common sessions after the seminar week, we will define the foundation of our Agritopia. During the first session we will write Agritopia's constitution, defining the premises we all agree on. In a second session will present your first vision to the studio and become the advocates for your proposals. We will discuss and negotiate your ideas, look for possible synergies between the topics and start the collaborations between the groups.

Creating a Common Model

In the last phase of the studio, you will work on developing and elaborating your design proposals for your specific topic on the site. These design proposals will be visualised in various scales in the model, in drawings, collages and more (see work formats ff.) Your proposals should address the questions, conflicts and urgent issues that you have encountered during your research and express your contribution for Agritopia.

During this process, we will invite scientists, designers, policy makers, and farmers and activists for Expert Workshops to discuss your ideas within one or several groups. Additionally, we will introduce the format of Group Feedback, where you will partner up with another group and are asked to present your work and give feedback on the other groups work reciprocally.

Submissions

Please submit all your work onto the server under 4_SUBMISSIONS

COMMON SESSION, Wed, 8 November

- The first vision, displayed on the common model
- Oral presentation with slides (10 min)

PROJECT REVIEW, Tue, 21 November

- Proposals displayed on the common model
- Oral presentation with slides (15 min)

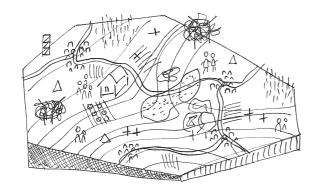
FINAL REVIEW, Tue, 19 December

- Proposals displayed on the common model
- Oral presentation with slides (20 min)
- Online reportage

Workshop for a common vision for Belgrade, 2018.

Designing Agritopia **Work Formats**

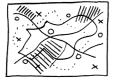
LARGE-SCALE MODEL



DRAWINGS







Cartography



Collages

TEXT



Titles & Essay

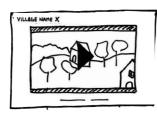


Oral Presentation



Notes

SLIDE PRESENTATION



ONLINE REPORTAGE



Large-Scale Model

Intuitive and suggestive, models prefigure a different reality and help imagine a possibility of moving from the here and now, to there and then. A large-scale model will be the tool of our collective project-both our final result and our working tool throughout the semester. We will work with diverse materials and techniques, and in a range of scales from 1:100 to 1: 1'500, exploring and visualising relationships between human practice and the territory and negotiating scenarios with each other.

Drawings Drawings are the heart of an architect's toolbox and irreplaceable for the representation of spaces and the visualisation of information. Drawings can be very diverse and have wide range: sketches and hand-drawn maps, collages, renderings, architectural drawings (floor plans, sections), territorial maps, narrative cartographies, but also diagrams and statistical representations.

Text Writing will be the backbone of your narrative. It will both force you to clearly name and relate your findings (writing as a tool) as well as allow you to communicate it to others (writing as an output). During reviews, text will be your script for the presentation and in the online reportage it will compose the narrational structure.

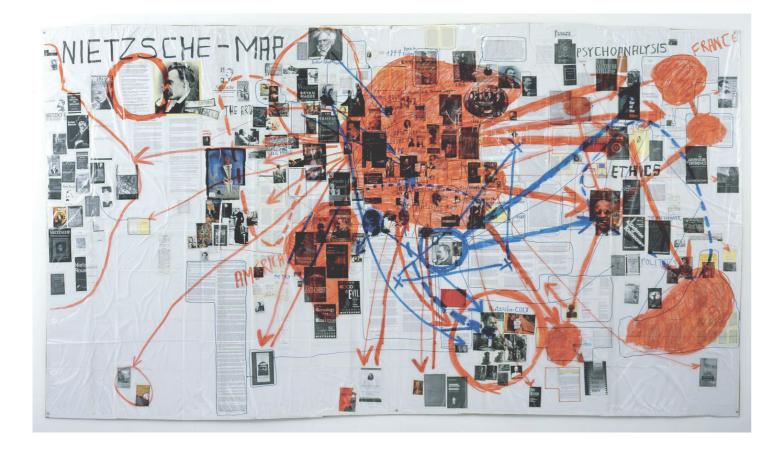
Slide Presentation

Your work displayed on the model will be accompanied by a slide presentation, that will help you structure your oral presentation and narrate your work. The slides can contain all sorts of mixed media including video and audio recordings. Your presentation should always contain a qualitative title and subtitles for your whole work and each chapter. You can find templates for the slide presentation here: 2_RESOURCES > 1_TEMPLATES > 3_SLIDE PRESENTATION

Online Reportage

In order to reach a wider audience, you will present your work online on the chair's website. The website will allow you to use different media and arrange them in a meaningful and comprehensive way. The task includes selecting your content, arranging it in a concise narrative and making good use of the integrated tools to showcase your work on the website. You are asked to also document your work on the model with photographs and make it part of your online reportage.

21



Reading Sessions Discussing Key Concepts

Task We will read and discuss texts to explore ideas and key concepts around the topics of territory, agriculture, food, future thinking and utopia in four sessions.

Readings 1 | Taking the Country's Side, 26.9.

- ETH Studio Basel, extract from achtung: die Landschaft. Lässt sich die Stadt anders denken? Ein erster Versuch (Lars Müller Publishers, 2016), pp. 47-85.
- Sébastien Marot, "A: Architecture & Agriculture," in Taking the Country's Side: Architecture and Agriculture (Polígrafa, 2 019), pp. 15-43.

2 | Who Feeds the World?, 3.10.

- Vandana Shiva, "Agroecology feeds the world, not a violent knowledge paradigm," in Who Really Feeds the World?, (Zed Books, 2015), pp. 15-27.
- Bill Mollison, "Introduction" and "Design in Landscape," in Permaculture Two: Practical Design for Town and Country in Permanent Agriculture (Tagari, 1979), pp. 1-28.

3 | Utopia: here and now, there and then, 10.10.

- David Harvey, "The Spaces of Utopia", in Spaces of Hope (Edinburgh University Press, 2000), pp. 133-81.
- Fredric Jameson, "Introduction: Utopia Now" and "Varieties of the Utopian," in Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions (Verso, 2005), pp. xi-9.

4 | Concrete Utopias, 31.10.

- T.J. Demos, "Beyond the End of the World: The ZAD against the Anthropocene," in Futurity Report Volume 1 (Sternberg Press, 2020), pp.
- Eva von Redecker, "Pflegen (Eigentum)" and "Schluss," in Revolution für das Leben (S. Fischer, 2020), pp. 263-92.

Deliverables Each text will be prepared and presented by 1 group of students with the help of prints/sketches (ca. 15 minutes). Each group is asked to come up with an idea of how to engage the fellow students in the discussion (ca. 30 minutes) that follows the presentation. The prints/sketches should include as a minimum 2 sketches revealing the key concepts of the text, information about the context of the book: who wrote the book, when, and why, and any relevant photographs. Before each session, each student should upload 1 question per text in the shared google docs (to be shared via email). The questions will help the presenting student group to moderate the discussion.

Key Concept Map

During each session, the groups hang their prints/sketches on the wall, add text elements/key words and cross reference to content from previous session(s). Over the course of the four sessions, we will thereby create an Agritopia Key Concept Map.

Submission

Please upload the printouts assembled in one PDF after each respective reading session to: 4_SUBMISSIONS > 1_READING SESSIONS

Thomas Hirschhorn, "Nietzsche-Map", 2003

Topics

- 1 CROPTOPIA How will we Grow Food
- 2 ANIMAL FARM
 The Future Beyond "Livestock"
- 3 HYDROTOPIA
 Redesigning the Water Cycle
- 4 COHABITOPIA
 Creating Biodiverse Habitats
- 5 FUTURE FARMS
 How will we Live on Farms
- 6 FUTURE FARMERS
 How will we Work the Land
- 7 FOODTOPIA
 Imagining a New Food Culture
- 8 FUTURE MOVEMENTS
 Connecting the City and the Land

CROPTOPIA How will we Grow Food



The cultivation of crops takes up 44% of the Canton of Zurich's agricultural land. This includes all plant-based food production, from crop rotation areas on which cereals and roots are grown, to fruit orchards, and vegetable cultivation. Crop cultivation faces a higher degree of industrialisation than other types of cultivation. Agroindustrial practices have led to many problems, like depletion of soil fertility and the increasing dependence on fertilisers, pesticides, and fossil fuels, linked to loss of biodiversity. These processes can also be observed on our studio site in Zürich Nord, but recently alternative and more sustainable practices have been gaining ground. For example, the city of Zurich allows only organic farming on its own farmland and community-led projects like Meh als Gmües act as pioneers of a new kind of social and ecological practices in agriculture.

Atlas For the Atlas, we want you to investigate the recent history and current practice of crop cultivation on our site. How did crop cultivation change in the course of the last century? What are the inherent geographic conditions for farming on the site-soil quality, slope gradient, sun and wind exposure? How do they affect farming practice? How many farmers practise crop cultivation on our site and what do they cultivate? How do different production methods impact farming practice, biodiversity, and public use of the landscape?

Designing Agritopia

Creating a hopeful vision for the future of crop cultivation in Zürich Nord and beyond, requires answering a range of questions. You will gather available information on the effects of climate change on crop cultivation. What are the main factors to be considered in regards to sun exposure, wind, temperature extremes and availability of water? Which farming practices can adapt to those conditions? Additionally, we ask you to study regenerative approaches to farming, based on principles of agroecology and permaculture and work together with ecologists and landscape architects. How can they help us find solutions for urgent issues of crop cultivation in the present? What kinds of planting techniques can be used to make the growing of crops more resilient? How do these new techniques reflect in the landscape - aesthetically, culturally, economically? How can you visualise the agricultural landscape of Zürich Nord in the future?

Soil section, Bodenkalender Agroscope, 2017

2 ANIMAL FARM The Future Beyond "Livestock"



It is impossible to imagine Swiss landscape without farm animals. 85% of all farms in the Canton of Zurich kept animals in 2018, and the farms in Zürich Nord are no exception. With pastures being are at the core of self-conception of the cultural landscape in Switzerland, the topic of animal farming provokes heated debates among consumers, farmers, politicians and other actors around questions of identity, ecology and animal ethics. The scientific evidence on the ecological detriments of animal farming on the rest of life on the planet is becoming more and more explicit. They point to high contribution of animal farming and fodder production to CO2 emissions, and they speak of excessive water and land consumption, decline of biodiversity, and adverse impacts on human health. Aware of these problems, more people are choosing to reduce meat and dairy consumption. The question remains, which role will farm animals play in the landscape in the future.

Atlas

For the Atlas, we would like to ask you to investigate the recent history and current practices of animal farming on our site. How did the role of farm animals change during the course of the last century? What role did technology and industrialisation of production play in that process? How many people are engaged in animal farming, and how has the work of an animal farmer changed over time? What animal species and how many individuals can be found on our site—chicken, goats, pigs, cows, buffaloes, and others? What products are they kept for? How visible are they in the landscape? How much land is used for meadows, pastures and fodder production on our site? What regulations and legal constraints apply and how can they be evaluated from an ethical perspective?

Designing Agritopia

Creating a hopeful vision for the future of animal farming in Zürich Nord and beyond, requires developing your position on ecological impacts of farming, animal rights, and dietary changes. Are values of animal ethics changing and will they lead to more humane, non-exploitative, forms of animal farming in the future? Is a more ethical cohabitation of animals and humans possible in our future landscape? What are current pioneering practices in animal farming that could help establish such cohabitation? Can visibility of animals in the landscape help us to establish a deeper connection to farm animals, and increase the quality and satisfaction in human life? Or do we need to radically reconsider these animal territories with all the spatial consequences that come with it? Can presence of animals in the landscape help other species and the soil, to create a more biodiverse and more resilient landscape? Who is the ideal animal farmer of the future and what does he or she do?



3 HYDROTOPIA Redesigning the Water Cycle

Water is a vital resource in territories we inhabit. It covers our needs for drinking water, for irrigation of agricultural fields; it generates more than half of the total national energy production, and constitutes a key quality of Swiss public landscapes. Agriculture accounts for a stunning 81% of Switzerland's fresh water consumption. Water scarcity—due to increasing demand for irrigation in agriculture, as well as climate change—poses a significant challenge for Swiss farmers. The higher frequency and intensity of droughts, less rain, and higher temperatures form a serious problem for the irrigation of agricultural land, particularly since many areas are still systematically drained through extensive infrastructure (channels, drainage ditches, pumping stations, etc.) Further, groundwater sources and open water bodies are threatened by pollution resulting from the intrusion of organic nutrients and chemical substances, fertilizers and pesticides, especially in areas of highly industrialised agriculture such as Zürich Nord.

Atlas

For the Atlas, we would like to ask you to investigate the recent history and current practices of (agricultural) water use on our site. How did drainage and irrigation methods change the landscape over the course of the last century? How does topography, geography and soil quality affect the need for drainage and irrigation systems on our site? Which areas of the site are drained and irrigated? How is the drainage water disposed, and where does the water for irrigation come from? Are agriculture practices on our site polluting the ground water and affecting the soil quality? What are the different water needs for different crops and types of cultivation? Do farmers on the site perceive impacts of climate change on water availability? Can you describe the physical structures and infrastructures of agricultural water systems, and map their positions? Which techniques and solutions are foreseen for the events of floods and droughts? Which solutions for rainwater harvesting are used?

Designing Agritopia

Creating a hopeful vision for the future in Zürich Nord, requires taking into account the effects that climate change on the availability of water on our site. We would like to ask you to research alternative methods of cultivation that can adapt to water scarcity and cope with the high fluctuation of available water during the year. What factors determine what cultivation methods are reasonable at which location on our site? How can we implement those new cultivation methods in agreement with nature conservation and human practices on the site? And how can we produce food without polluting the hydrosphere? How can we store water on site to buffer the expected rainfall and drought extremes? Can we think of agricultural and other landscapes as new kinds of "water sponges"? How do these changes benefit the quality of human life and biodiversity?

30 Irrigation of fields by the fire department near Regensdorf, 1976.



4 COHABITOPIA **Creating Biodiverse Habitats**

In the seemingly pastoral, yet highly technological territory of Switzerland, the meaning and the role of nature is far from settled. The failures of recent initiatives meant to protect the environment, such as the CO2-Gesetz, the Trinkwasser-Initiative and the Pestizidfrei-Initiative, have shown that there is little agreement on what kinds of natures are worth preserving, and how. The Canton of Zurich stated recently that their targets for preserving and promoting biodiversity, as of November 2022, "were not achieved" and "negative developments are expected". The conservation paradigm itself is under discussion, with many researchers and practitioners pointing out that we need to go beyond the nature-culture divide and think of nature not as isolated, but interwoven with the rest of the territory. Agricultural landscapes play a major role in the decline of biodiversity and the loss of species. The negative impacts of agriculture range from intensive land uses oriented toward monoculture, the use of fertilizers and pesticides, the light pollution, to the lack of landscape structures that host diverse species such as hedges and trees. Our site in Zürich Nord is no exception. The current measures, such as the promotion of ecological infrastructures such as various ecological corridors, have not yet stopped the downward trend of biodiversity.

Atlas For the Atlas, we would like to ask you to investigate the recent history and current practices of nature conservation and biodiversity promotion on our site. Can you link these practices to the changing conception of nature in the course of the last century? How did nature areas on our site transform due to urbanisation and industrialisation of agriculture? Which lands are protected under which policies? What are current tools of biodiversity promotion in agriculture and how effective are they? How can you recognise these tools and measures in the landscape? Can you photograph them, draw them and map them? What are opinions of farmers, experts and citizen on the site regarding the quality of nature areas, and about the various measures by the government and other initiatives related to nature and biodiversity?

Designing Agritopia

Creating a hopeful vision for the future of non-human life in Zürich Nord, requires you to build an understanding of the various tools of nature conservation and biodiversity promotion, and the ways they could be applied on our site. Can nature protection in the territory become more than just a patchwork of "ecological compensation areas" connected through "ecological infrastructures"? Do agricultural practices and have to continue harming nature, or could a different kind of nature-friendly farming practices help create a morediverse landscape? Can we create future landscapes of cohabitation? Do we need, in certain areas to radically reduce anthropogenic influence in the landscape in order to promote non-human habitation? How do you see the role of the human carers in the protection of nature and the sustainable use of land? Will inhabitants of the future live in tighter connections to land and nature, and how will these connections be practiced and materialised?

Cohabitation in the Campagne Genevois, Lloyd Broda, 2017

5 FUTURE FARMS How will we Live on Farms



Agriculture as a profession has changed radically over the course of the last century. Industrialisation, automatization and change in labour and organisation have also changed the requirements for farm architecture, so studying farm buildings as infrastructure reveals a lot about the life and agricultural practices of the past and the present, relationships between farmers and their land, their animals and their families. Nowadays, most farm buildings are located outside the building zone. Change in use or appearance of farm buildings, whether for dwelling or for farming, is highly restricted and regulated through heritage protection and building laws. Even new constructions that are required for agricultural practice are highly regulated. Even though the number of active farms and farmers is rapidly declining, the farm architecture remains visible and present in the landscape, but often only as an outer shell, as the buildings are no longer used for farming but stand empty or are used as storage space, as can be well observed on our site in Zürich Nord. As the practice of farming will continue to change the question remains what will happen to the farms and hamlets as a physical reality.

Atlas For the Atlas, we would like to ask you to investigate the historical development and current state of farm architecture on our site. How did typologies of farm buildings change in the course of the last century? And what does the farm architecture reveal about the life and work of farmers in the past and in the present? How many farm buildings exist on our site? When were they built and how are they used now? IN what relation does farm architecture relate to the landscape? Where do people live on farms? And where do they work? What are the current building laws around farm buildings? And how the declining number of businesses affect the existence of farm buildings in the region?

Designing Agritopia

Creating a hopeful vision for the future of farms in Zürich Nord, requires you to research and analyse the future scenarios of agricultural labour practices on our site. How will farming as a profession evolve in the future? Can farm buildings be preserved and honoured but at the same time stay flexible in regards to its use? We want you to study alternative models of living and working in existing farm buildings. What are possible functions for farm buildings that could coexist with farming as a profession? What are concepts of collective living and working and common ownership that could apply to farms and hamlets on our site? Can we envision a landscape where farming as a practice remains visible in the landscape while allowing new forms of farm inhabitation at the same time?

6 FUTURE FARMERS How will we Work the Land



Farmer's numbers have dwindled steadily since decades: Today they make up just 1.1 % of the population of the Canton. Most of them run family businesses faced with long working hours, low incomes, absence of social benefits and social recognition, and pushed into a risky reliance on direct payments, automation, chemical fixes and the use of seasonal labour. Research has shown that a pathway towards a diverse landscape—whether biological or cultural—and towards better quality of food, requires more human work, and more care. At the same time owning or buying land in Switzerland is only possible for professional farmers within 10 km radius from their place of residence, making it hard or impossible for landless or aspiring farmers to acquire land and enter agricultural practice. Who will be the future farmers? Can community-based agriculture be a hopeful alternative, especially for agriculture close to the city centre, where people working in agriculture do not any longer have to live on farms?

Atlas For the Atlas, we would like to ask you to investigate the recent history and current labour practices around agriculture on our site. How did farm labour change in the course of the last century? How many people are actually working in agriculture on our site today? What models of agricultural labour, such as family labour migrant labour, can be found on our site? Who is working in which position and what are they paid? What role does unpaid labour and seasonal migrants play in the agriculture on our site? And how do different types of cultivation (crops, animals) define the labour organisation?

Designing Agritopia

Creating a hopeful vision for the future of agricultural labour in Zürich Nord, requires you to find your own position on the farming profession and answer questions of who will be farming in the future: families, seasonal migrants, robots, or urban dwellers? How can the precarious situation of farmers be improved? Do we have to radically shift our attention to techno-centred solutions and automatization, where drones and machines will more and more take over human labour in agriculture or can we envision a future where farming integrates the former passive consumers as active contributors in solidary economies of shared agricultural work and shared risks protecting against changing prices or bad harvests?



7 FOODTOPIA Imagining a New Food Culture

Prior to the industrial era, the local organisation of the food supply was central to the economic development and the survival of the city. Nowadays, our food consumption is dependent on global networks of distribution and trade. The food system has become delocalized. Switzerland has a 57% self-sufficiency rate in terms of food security. It is a country which relies on food imports from neighbouring and far-away countries especially for fruits, vegetables, meat and cereals. Zurich is no exception, only 25% of food consumed in the city is sourced regionally, meaning within 30 km of the urban centre. Food is distributed largely through large retailers such as Coop and Migros. Finding alternatives to this centralised model of food distribution has become a quest in the last decades, as global food markets are inevitably linked with missing transparency, large corporations and greenhouse emissions. From the traditional weekly markets, over direct selling at farm shops to solidarity agricultural cooperatives, there are now numerous efforts in the region of Zurich to socialise our food supply chains.

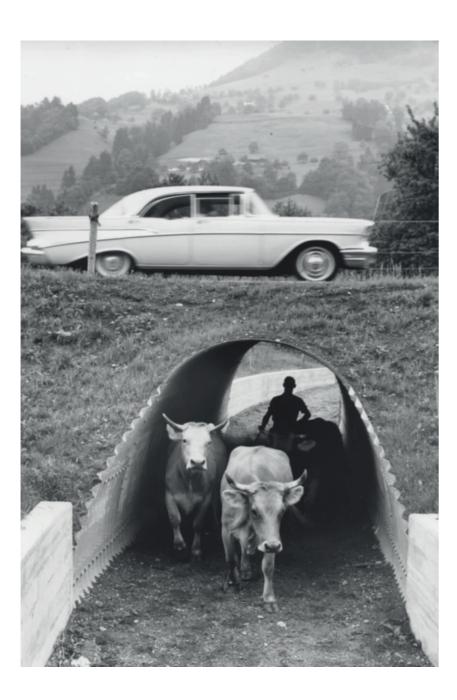
Atlas

For the Atlas, we would like to ask you to investigate the recent history and current practice of food distribution and consumption on our site. What were food supply chains in the past? What was the role of self-sufficiency on our site? Where does the food produced on the fields and farms in Zürich Nord end up nowadays? Who buys and sells is, what is the supply chain? And where does the food we eat in Zürich come from? What are alternative models of food distribution that can be found on and around our site, from markets to direct selling in farm shops and more? And how many farm shops and supermarkets are on the site? How many people do those alternative methods reach and where are the limits? What are the effects of mobility and diet on the way our food is distributed and consumed?

Designing Agritopia

Creating a hopeful vision for the future of food distribution and consumption in Zürich Nord, requires you to imagine and design our food culture of the future. How can we adapt our food culture to counterbalance the environmental challenges of tomorrow? Do we have to accept that food markets can only be improved and dealt with on a global scale? Or can we bring consumers and producers closer together? Will it lead to benefits, from ecological diversity to food security and to better local participation and governance? What is the role of alternative practices, such as farm shops, community-based agriculture, platforms like Koopernikus or Farmy? Can we move from a society of Globavores to one of Locavores?

8 FUTURE MOVEMENTS Connecting the City and the Land



Unbuilt urban edges such as our site in Zürich Nord are under immense pressure to be overbuilt. At the same time the agricultural and natural landscapes in the vicinity of urban centres function as important local recreation landscapes for urban dwellers. Nonetheless, there is a divide between the so-called rural and the urban: The areas of housing and working marked by rising rents, exorbitant prices of land and real-estate seem worlds apart from the agricultural fields that lie right next to them. Non-agricultural economies and ways of life have spread across the former rural areas, but for few people the engagement with the land or its inhabitants goes beyond the occasional sunday walk or seldom visit at a farm shop. Fuelling this divide is the current mobility infrastructure, which demonstrates that public transport and mobility sharing is a characteristic of urban areas, and many agricultural territories are only accessible by car. What would it need to bring the city and the land closer together, to interweave the urban and agricultural?

Atlas For the Atlas, we would like to ask you to investigate the recent history and current patterns of movement on our site. What, apart from agriculture, was the landscape of Zürich Nord used for in the past? Who are the users and protagonists of the site today? What are patterns that you can describe, in regards to type (foot, bike, car, public transport, etc.) and frequency of movement? What are people doing on the site, is it used only for recreation or do people commute to the site for other reasons? What forms of interaction are there already between inhabitants of the urban edge and the agricultural landscape? What role does the law and spatial planning regulations play in the divide between the city and the land?

Designing Agritopia

Creating a hopeful vision for future movements in Zürich Nord, requires you to predict movement patterns of a future beyond 2050. How do you imagine people to move through the landscape of Zürich Nord in the future? What will be their purpose of moving? Will there be more interaction between inhabitants of the city and the land? If yes, what type of interaction? Can we weave the seemingly disconnected worlds of agriculture and urban living together? Can the proximity between the city and the land lead to healthier ecologies and healthier people? Can the close relation of the site in Zürich Nord to the urban centers of Zurich, Rümlang and Regensdorf promote economies of care and reciprocity sheltered from the market? Can you transform a recreational into a public landscape?

Arnold Odermatt, Oberdorf, 1961

Teaching Environment & Assessment

Teaching Environment We aim at mutual respect and responsible interaction with each other—regardless of origin, education, religion, ideology, physical abilities, gender, or sexual identity. If you observe or experience any type of harassment, discrimination, or mental/ physical violence, there are several contact persons:

- Evelyne Gordon (gordon@arch.ethz.ch) studio-external contact person at our chair
- Elisabetta Giordano (giordano@arch.ethz.ch), the official D-ARCH contact in case of inappropriate behaviour
- William Tice (ticew@student.ethz.ch) or Qianer Zhu (zhu@arch.ethz.ch), certified contact persons of the "On Mental Goodness" group at D-ARCH

Group Work We grade your work per group, which means students from the same group receive the same grade. We believe that different perspectives and skills can enrich a group's work and ultimately lead to better projects. However, if irreconcilable differences of opinion arise within your group, please do not hesitate to contact us.

Assesment We assess your work according to the degree to which you have met the following learning objectives:

General

- 1) You have participated during inputs, reading sessions, and desk crits
- 2) You have collaborated well within your group and in the studio
- 3) You have shown self-initiative (when you needed support)
- 4) You have developed your work independently

Atlas of Zürich Nord

- 1) You have understood the task and steps needed in order to create the Atlas.
- 2) You have analysed the recent history and current practice of your topic on the site with the help of field work, interviews, GIS mapping, and online research.
- 3) You have systematically carried out the field work and interviews in a professional manner and were able to draw meaningful conclusions from your
- 5) You have thoughtfully and creatively represented your research using tools of narrative cartography, the format Visible World, and a mixed media presentation.
- 6) You have created a comprehensive narrational structure to create a compelling presentation during the Atlas Review.

Collaborative Design Project

- 1) You have understood the task and the steps needed in order to create design proposals on your topic for the site.
- 2) You have critically reflected and evaluated your research findings, drawn convincing conclusions from those findings formulated your own standpoint.
- 3) You have used your imagination to draft an enticing first vision for the future of the site that is based on your previous findings.
- 5) You have creatively developed a relevant design project which integrates your research findings, conclusions, and imaginary.
- 6) Through negotiating and communicating with other groups you have enriched your knowledge and developed a design project that creates synergies with other projects of the studio.
- 7) You have thoughtfully and creatively represented your work in the model and by using mixed media.
- 8) You have narrated the research comprehensively and concisely to create a compelling oral presentation and an enticing online reportage.

Written Statement After the semester, each student will receive a short qualitative written statement as a supplement to the grade.

Digital Resources

GIS Data

Geoportal des Bundes map.geo.admin.ch

Geoportal Kanton Zürich

maps.zh.ch

GeoVITe - Geodata Service of the ETH Zürich

geovite.ethz.ch/index.html

OpenStreetMaps openstreetmap.org

Gisco EuroStat

ec.europa.eu/eurostat/de/web/gisco/geodata/reference-data

Overview available GIS-Data Switzerland

cloud.mapplus.ch/opendata/doku.php?id=en:start

Statistics and Information

Bundesamt für Statistik - BfS

bfs.admin.ch

Atlas BfS

atlas.bfs.admin.ch

Swiss Open Government Data

opendata.swiss

Amt für Raumentwicklung ARE – Kanton ZH

are.zh.ch

Communal Statistics

Interaktive Gemeindestastistiken - BfS

bfs.admin.ch/bfs/de/home/statistiken/regionalstatistik/regionale-por-

traets-kennzahlen/gemeinden.html

Interaktive Gemeindeporträts – Kanton ZH

zh.ch/de/politik-staat/gemeinden/gemeindeportraet.html

Reiffeisen - Communal Statistics: Data Visualisation

raiffeisen.ch/rch/de/privatkunden/hypotheken/hypopedia/municipality-fact-

sheet.html

Schweizer Gemeindeverband (Swiss Association of Communes)

chgemeinden.ch/

Property Information

Cadastre & Land Registry Information

cadastre.ch/de/gb.html

Notariate, Grundbuch- und Konkursämter Kanton Zürich

notariate-zh.ch/deu/

Historic Maps

Old Maps Online

oldmapsonline.org

Kartenportal.CH

search.kartenportal.ch

ETH Library — Geodata & Maps

library.ethz.ch/en/Resources/Geodata-maps

Historic Images

Universität Bern – Ryhiner collection

unibe.ch/university/services/university_library/research/special_collections/

map_collections/ryh_ch/index_eng.html

Stadt Zürich — Historische Bilder stadt-zuerich.ch/historischebilder

ETH Library - Bildarchiv

library.ethz.ch/de/Ressourcen/Bilder-Fotografien-Grafiken/Bildarchiv

Baugeschichtliches Archiv - Online Sammlung

baz.e-pics.ethz.ch

Historic Archives

Historisches Lexikon der Schweiz

hls-dhs-dss.ch

Archives of Rural History Switzerland histoirerurale.ch/afa/index.php/de/

History of the Swiss cadastral system cadastre.ch/en/about/geschichte.html

44 45

Server Structure

URL smb://nas22.ethz.ch/arch_nsl_topalovic_student/

GIS Library .../0000_GIS-LIBRARY

Studio Folder .../2023_HS_AGRITOPIA/

.../1_SEMESTER INFO

- Student Info
- Poster
- Semester ProgrammeSemester Timeline
- Reader
- Inputs (Introductions, Lectures, Tasks)
- Permission Letters

.../2_RESOURCES

- Fonts
- Templates
- Texts
- References
- Research Data
- GIS File
- Maps

.../4_SUBMISSIONS

- Reading Sessions
- Atlas Review
- Common Session
- Project Review
- Final Review

.../6_STUDENT FOLDER

Personal exchange folder for group work

46 47

Contacts

Teaching Team

Milica Topalovic aot@arch.ethz.ch

Jakob Walter jakob.walter@arch.ethz.ch

Dorothee Hahn hahn@arch.ethz.ch

Jan Westerheide westerheide@arch.ethz.ch

