## SUPERSTUDIO

WS2023

# SUPER

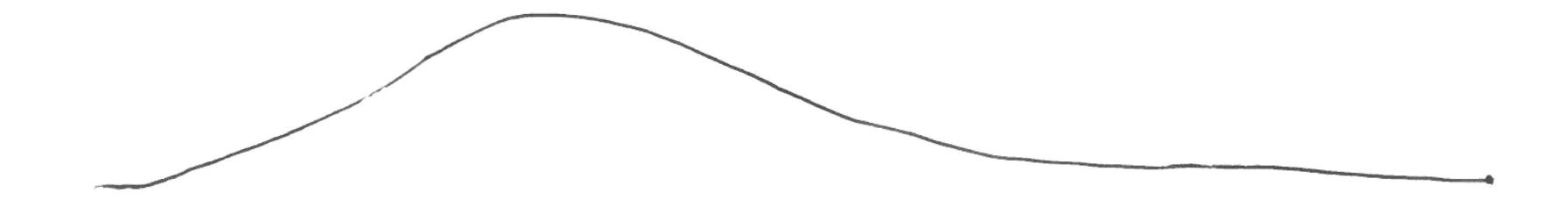
short story

That the world looked different in the past we are not only recognizing with the current so named CLIMAT CRISIS. From a viewpoint of architecture and human investigations on the planet our progress was based till the 15th century on a quite homogenous slow development. Comparable with a travel on a donkey.

Since the 17 century we started to jump on mechanical horses, steam and petrol driven vehicles, learn to fly and finally we jumped on realtime networks. And as we can feel the speed today ( with the realtime network even the blowing wind on our skin is missing ) we have to recalibrate our position as architects permanent. To build and to domesticate all kind of things, was all time part of this development. But why we build like we build or how we have to build today?

During an interview after the lecture "ON the END of HISTORY" in 1992 the media philosopher Vilem Flusser, made an extrem short discourse through the HISTORY which I can't do better. So let me quote him on the next slides to create an understanding, or a reading or an interpretation of our current situation.

Flusser is responding to the question: how he is observing the development of urban spaces with in the influence of digitalization: with the more or less the following word and images:



#### Vilém Flusser On the End of History

"On the End of History" was originally titled "Vom Ende der Geschichte" and was a variation of a manuscript of a lecture given at the Vienna City Hall on March 13, 1991. It was first published in Ende der Geschichte, Ende der Stadt? (Vienna: Pinkus, 1992)

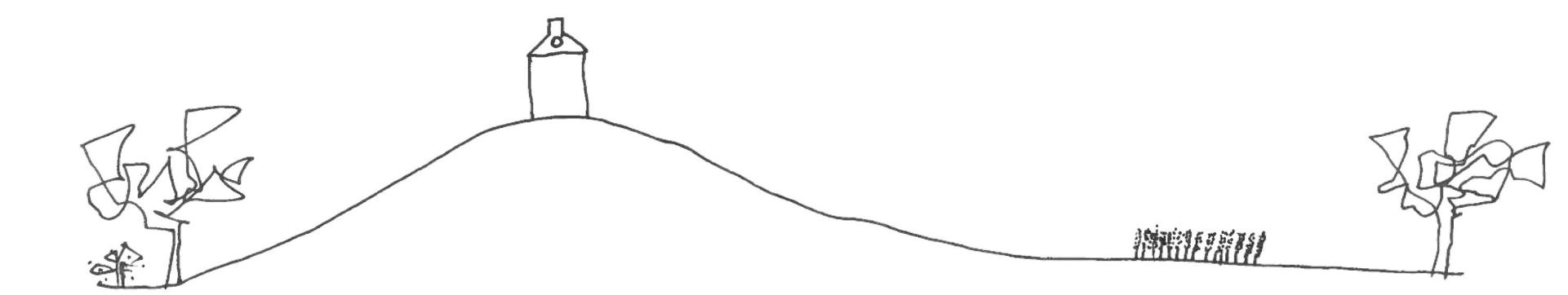
I would like to start with the origin, where the city comes from, because there is the root of all these Questions. The city was formed about 10,000 years ago, with the Transition from nomadism to sedentism, ....., namely on river banks. And she immediately consisted of three spaces, where each of them was very different from each other.



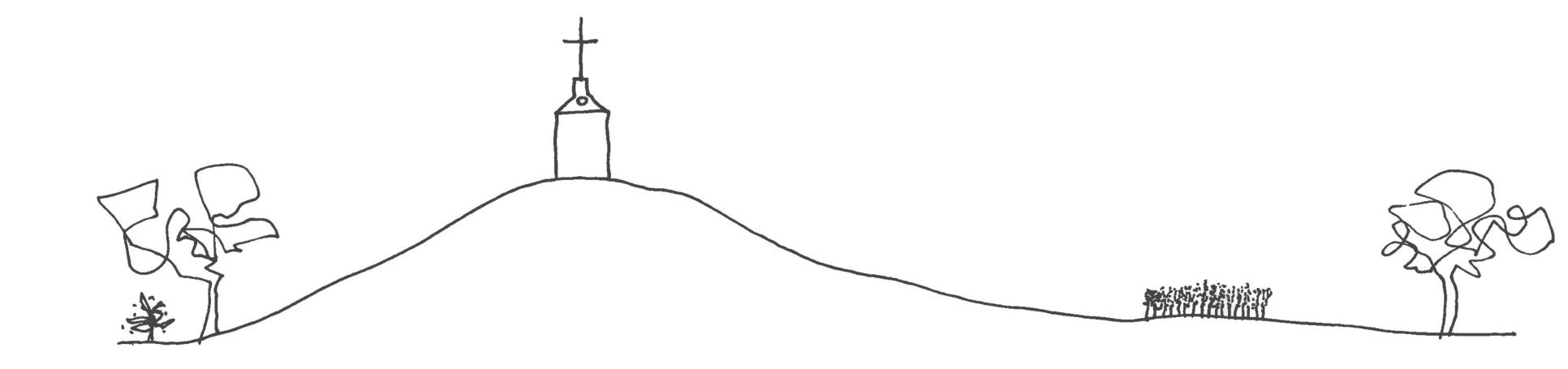
The fundament or the origin of the city we can also mention as a settlement to rest and to wait. We can see the city as a waiting room for the seed to ripen.

- today much - light in the sense of waiting for death, but originally it was the waiting for the harvest.

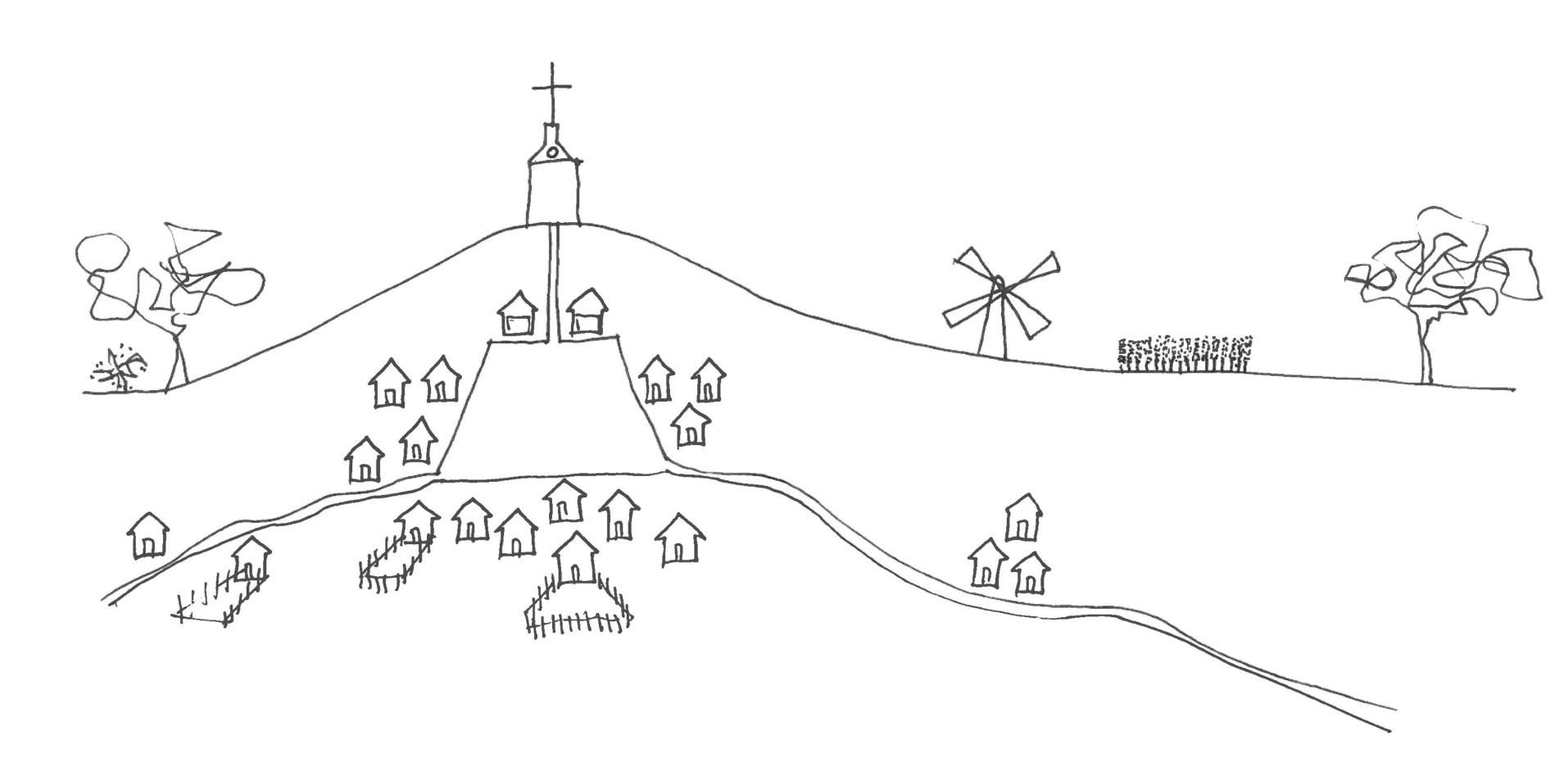
And there we created the following three Spaces:
One of them was a hill on which a granary stood.
The harvested grain had to be protected against the flood.



This hill, the Acropolis, was the SACRED / HOLY SPACE that the Greeks called »demenos«. On this granary was a watchman positioned, who guarded the harvested fruit and as he had a good view he soon became one priest, to a priest-king, and finally to God.



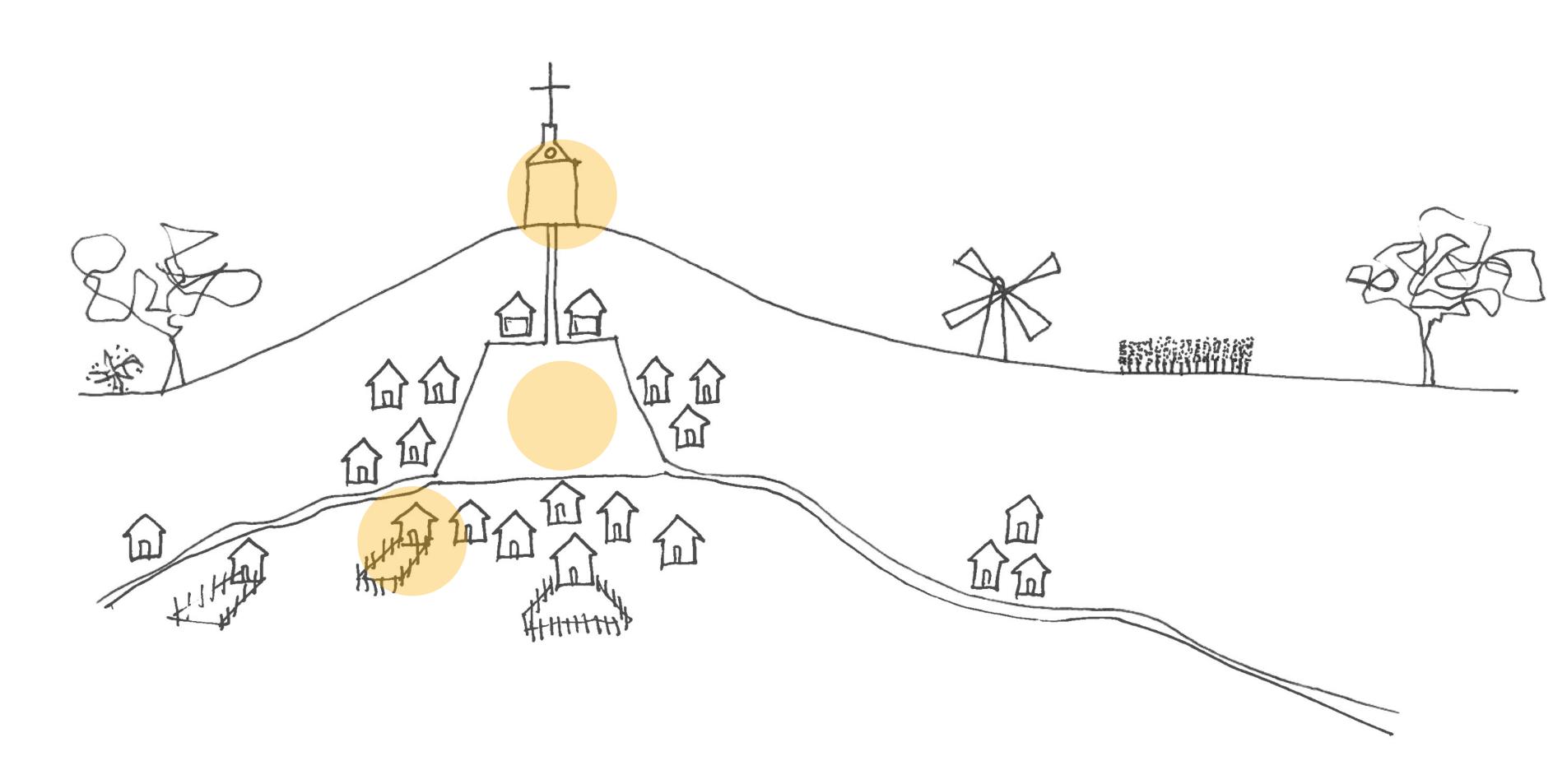
Below the hill was the room, where the people came together to carry the grain up the hill or to redistribute it. This was named by the Romans as the so called , forum', by the Greeks ,agora', and today we call it »republic«. Into this republic, more and more roads got constructed and connected, where private houses stood, the Greeks called them "oikoy" and the Romans, much better descriptive as »res privata«, that mens: »the Space which is cut off from the holiness and the public," Today we are discussing and defending this space as the »own privacy«.



This basic structure and composition of the city, dominated by the tree spaces: the HOLY, THE PUBLIC and THE PRIVAT SPACE is not more valuable. Specially since the HOLY SPACE has steeped into the background.

Some people mid argue that the banks and train stations were the holy spaces of the 19th century and that the HOLY SPACE of the 20th century in France perhaps is the centre Pompidou;

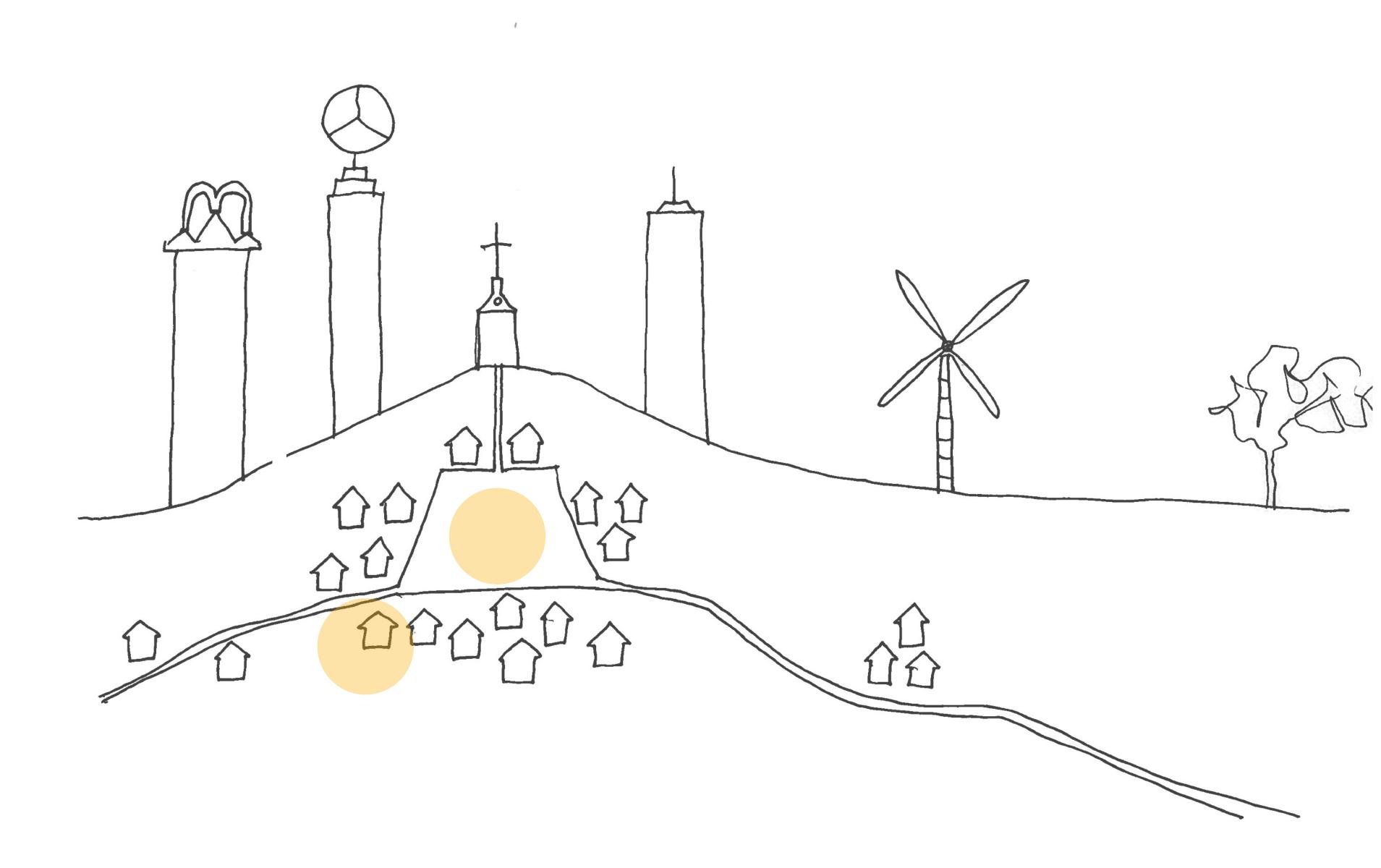
I have to underline that the HOLY SPACE has been functioning for at least 200 years are no longer correct. If you visit the Stephansdom in Vienna for instance, then you will see the degradation of the HOLY SPACE, In front we have now a house which is higher then the church.



The PUBLIC and the PRIVATE space have preserved for thousands of years.

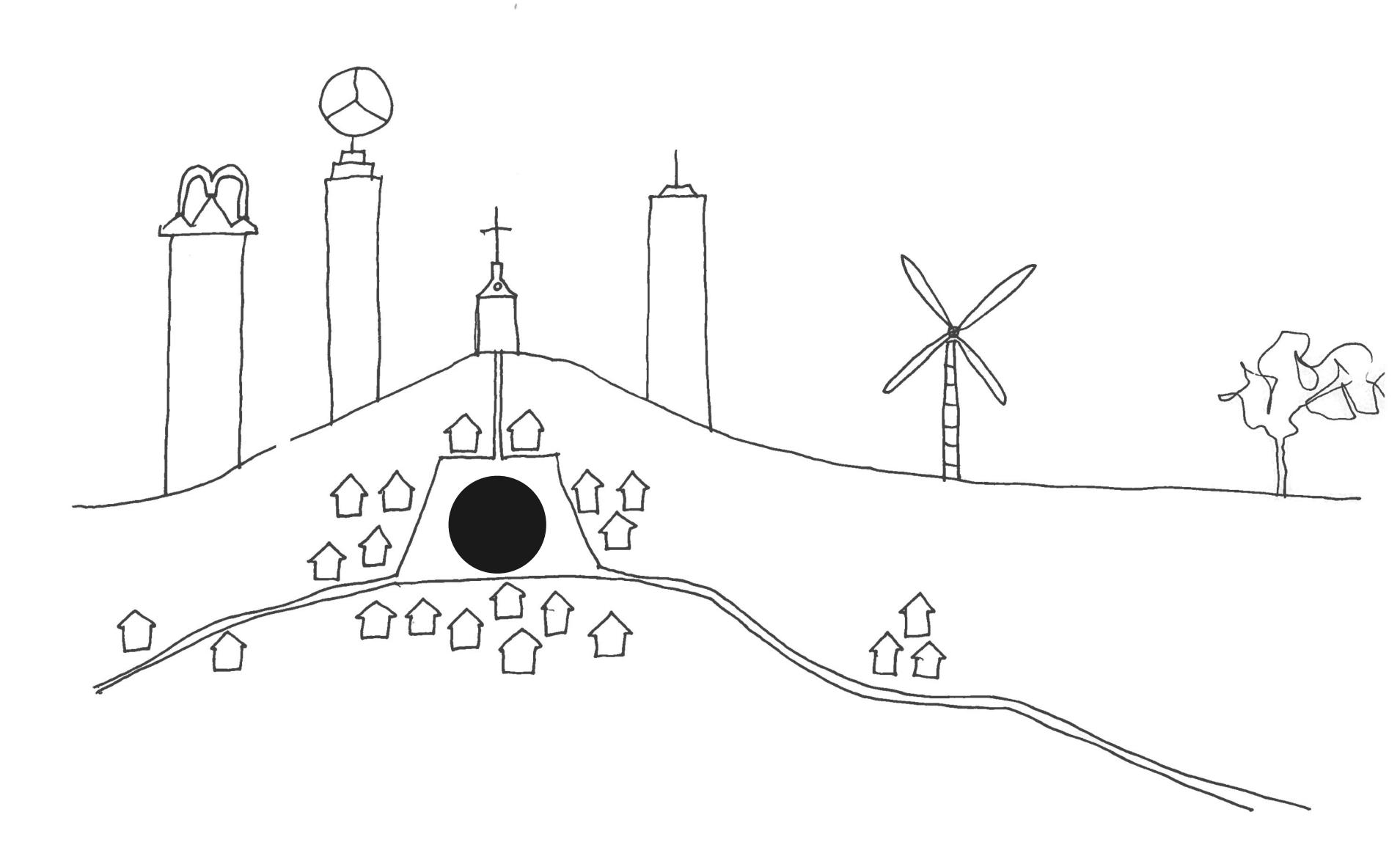
The Philosopher Hegel saw in this oscillation between these both spaces a basic principle of his "phenomenology of the spirit". He said: "You leave your PRIVATE space and to enter into the PUBLIC to discover the world and to lose your self in this process. When you return home from the PUBLIC space you will find your self back and lose the world." He called this phenomena "the unfortunate consciousness".

Today the separation between the public and private space is no longer clear, that would mean if we trust Hegel, we are losing our consciousness. This separation has not been since the so-called communications revolution more durable. The private space is defined, the public space not. The private space is through walls and roofs defined, and in the walls there are two types of holes: Windows and doors. The window is a hole to look out - thus according to the theory »one sees the republic without getting wet" -

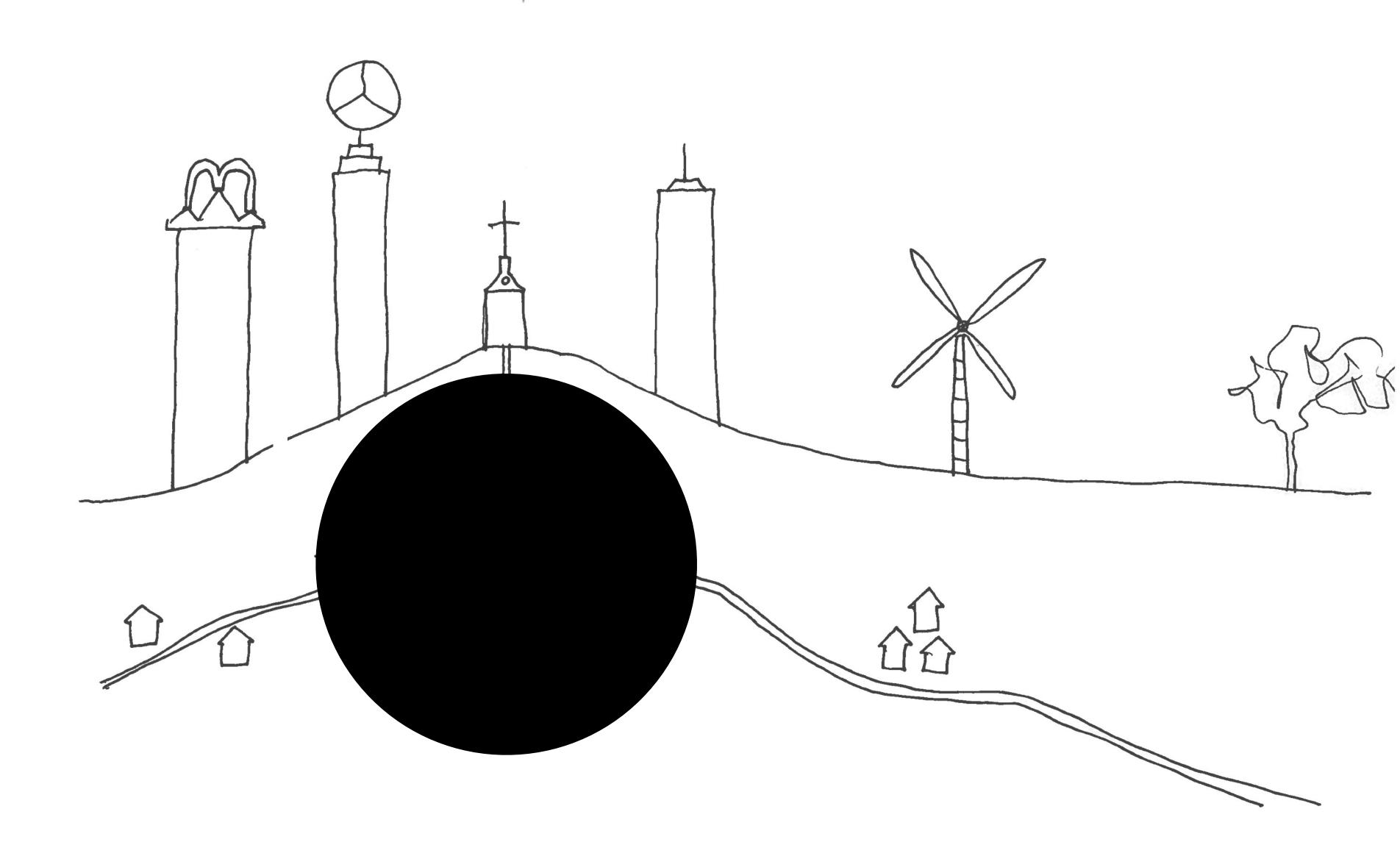


and the door is a hole for the engagement. You went through this hole to participate in the republic, to take or to discover something, you went through the door to publish or to engage yourself....... So this is the origin of the door, while the window was made for the noble view outside.

But both holes have an inner dialectic. Through the door the police could enter as a represent of the public and the politics. On the other hand, you had to protect yourself by making locks and keys, which, however, depending on their quality could be broken. Through the window usually only the neighbors could had a view in. What I have now described to you existed until the beginning of the Second World War. At the public space the politics were made and politics were always something Dangerous that threatened people. The HOLY SPACE where the counterpart to keep an eye on the politics. The character of the public space and of the politics was, that it was dominated by all of us publishing informations and products, means that we had to carry out our information, prepared at home to the market place, and to get information, we only could get them, when we were stepping out of the private room and then conquered them, stole them, bought them, sold them or whatever.



All this is no longer true today, because both the walls and the doors are now pierced by cables, antennas and immaterial cables, so that information now flows into the PRIVATE space. Today you get all the information delivered to your home without having to move. It makes no longer sense to go to a concert, theatre or school. So the public space and the city have lost all justification. That's the basis; now you can ask me further.



That's a quite a depressive end of a story which starts from an explanation of a clear order of the origin of the 3 to each other depending spaces. Also of a story where urban settlements had a strong connection with the land, settlements and nutrition. But lets continue the investigation on our SUPERSTUDIO semesters to bring more light in to this darkness.

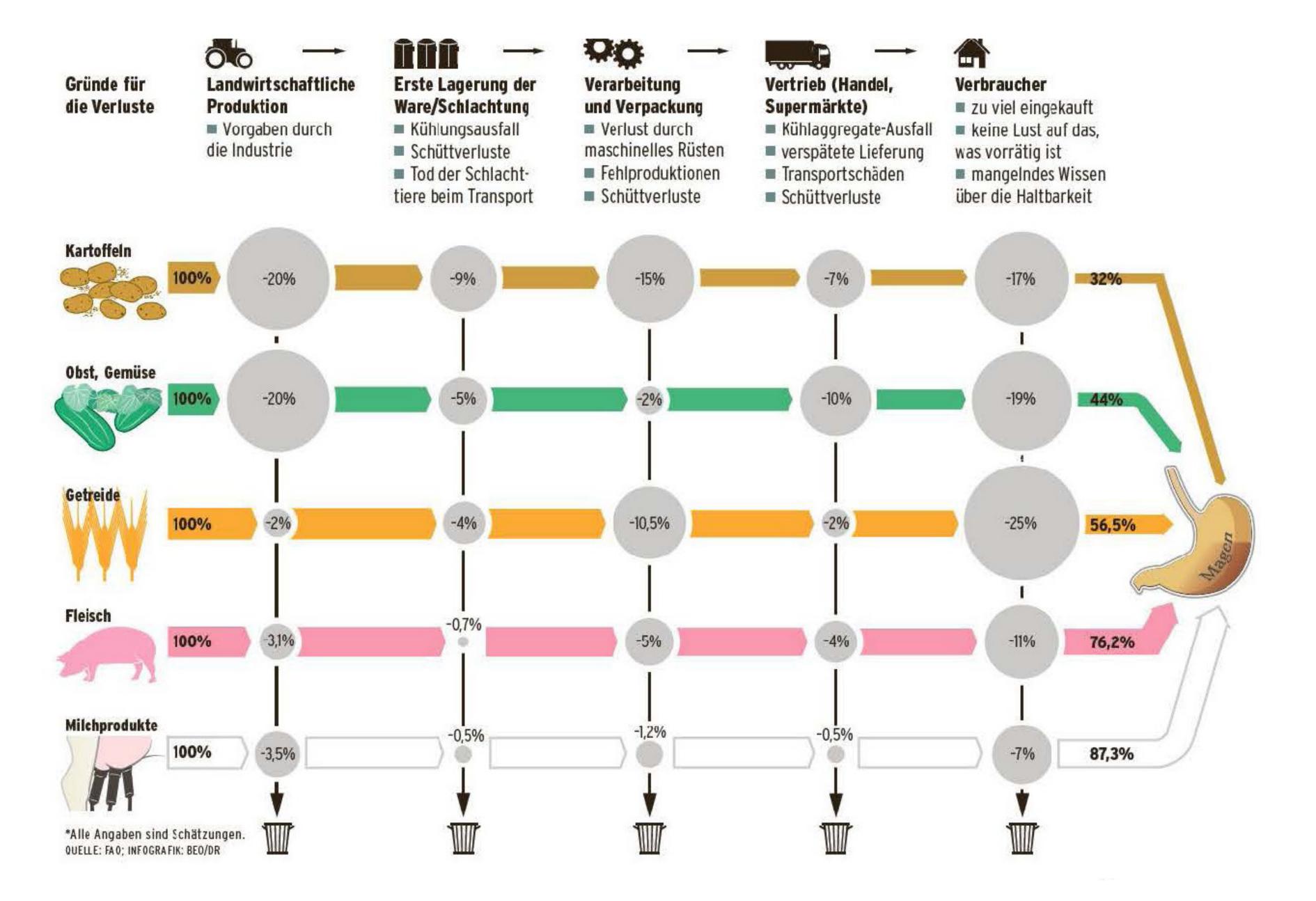
# SUPERSTUDI 2022

Martin Fröhlich
Zoe Lefèvre
Claire Logoz
Sebastian Marot
Bastian Marzoli
Lara Monti
Marion Mouny
Katia Naouri
Clement Périssé
Vanessa Pointet
Camille Sineau
Daniel Zamarbride

Superstudio is a prospective and collective studio that examines the possibilities of imagination and realization of latent futures. Through its title *Latent Futures*, Superstudio intends to explore visions and attitudes capable of seriously confronting the present environmental condition. Superstudio lands thus in the Geneva region to reflect and act on the multiple dimensions of the environmental crisis (climatic change, biodiversity collapse, water scarcity, erosion of soils, energetic descent, etc.). The future (and the future of architectural practice) will be scrutinized with the aid of a compass: the four narratives developed by Sébastien Marot for the exhibition *Taking The Country's Side*. By applying the four scenarios to the specific territory of Geneva, the studio will pursue a speculative research-oriented nature developed during the past years, adding a layer of reflection. The studio will conclude with a public exhibition in Archizoom.

EPFL Architecture Master / Winter semester 2022

EPFL SAR ENAC IA



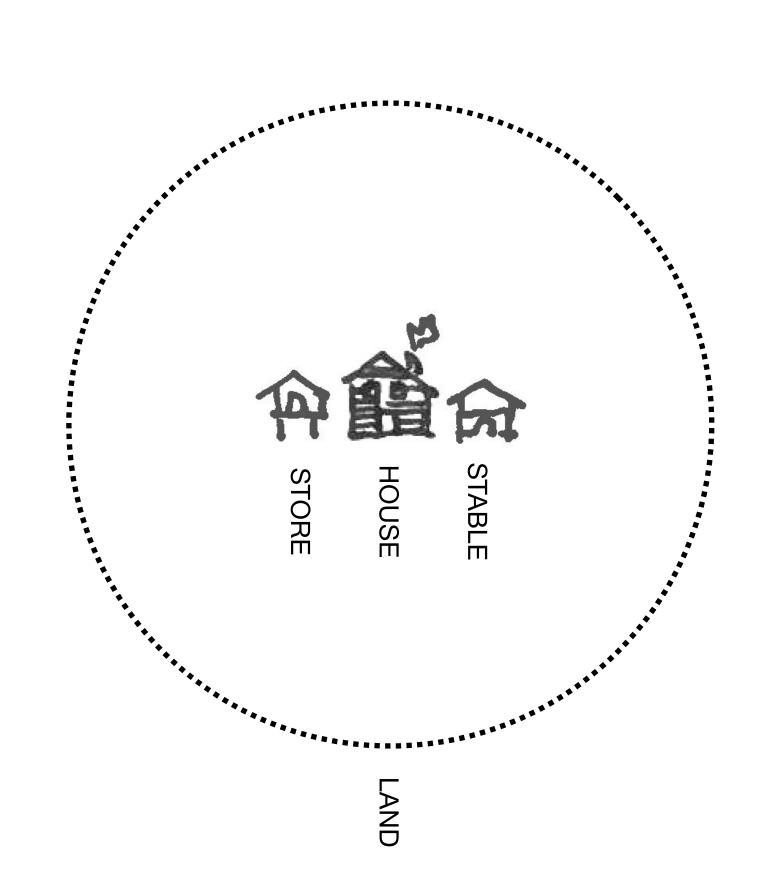
## Losses and waste in the food life cycle

Jungbluth et al; Reduction potentials-BAFU; 2012









**GRAIN FARMING** 

FLAIL HOUSE BARN / SHEAF STORE (STADEL)

MLL

**BAKEHOUSE** 

HOUSE

STABLE **PIGSTY** STY (CHICKEN, SHEEPS a.o.)

STABLE HOUSE STABLE HOUSE

WINE FARMING, CHESTNUT CULTIVATION, a.o.

DRYING RACKS (HISTE)



**WINE PRESS** 

HOUSE with CELLAR DRYING HOUSE

SLAUGHTERHOUSE

From "Häuser und Landschaften der Schweiz" Richard Weiss 1959

**CATTLE FARMING** 

PRINCIPAL RESIDENCE

STABLE

WASH HOUSE

**VALLEY** 

**PIGSTY** 

STABLE

MAIENSÄSS ALP

**GRAIN FARMING** 

ML

FLAIL HOUSE

BARN / SHEAF STORE (STADEL)

WINE FARMING, CHESTNUT CULTIVATION, a.o.



**BAKEHOUSE** 

PRINCIPAL RESIDENCE



**HOUSE with CELLAR** 

WINE PRE



STABLE



DRYING HOUSE

SLAUGHTERHOUSE

STABLE HOUSE

STABLE

**CATTLE FARMING** 

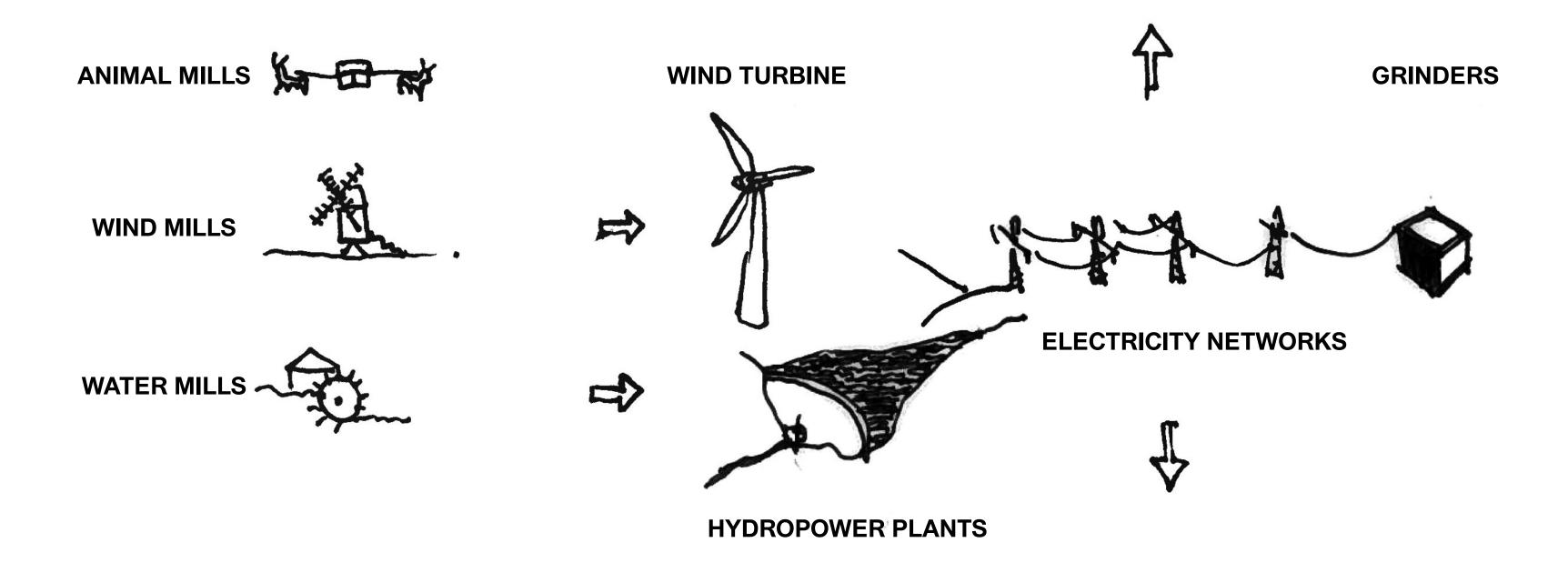
#### TREAD MILLS



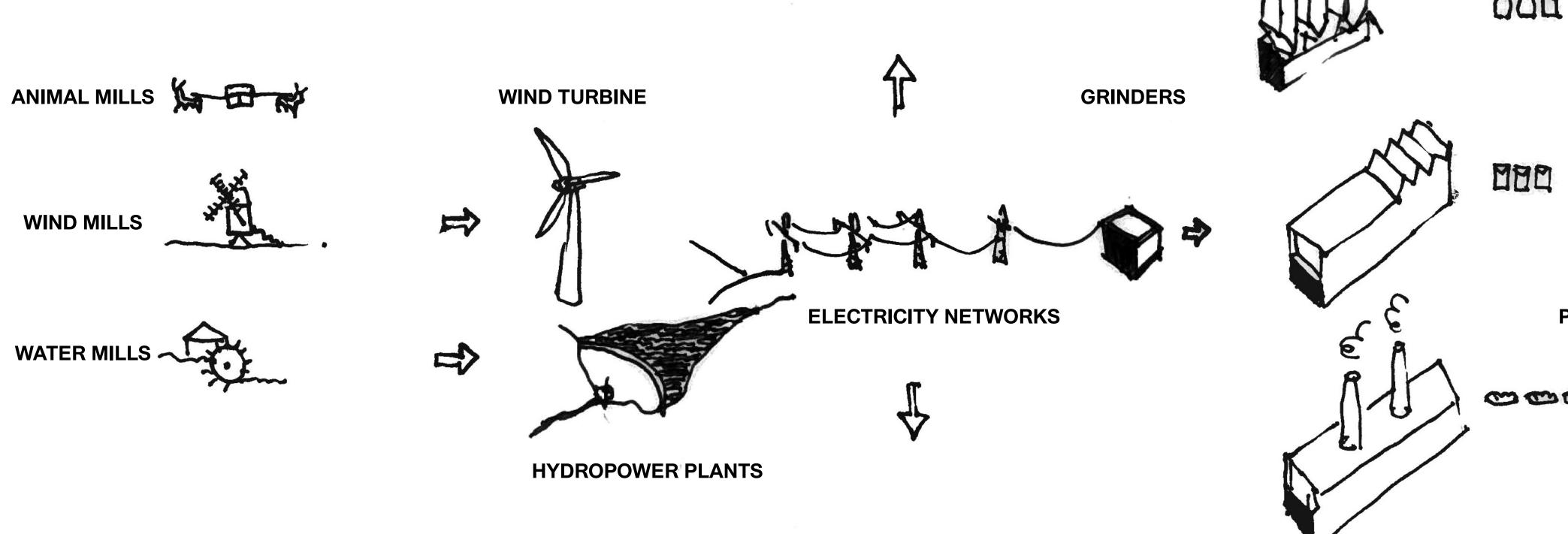
WIND MILLS



#### TREAD MILLS



#### TREAD MILLS

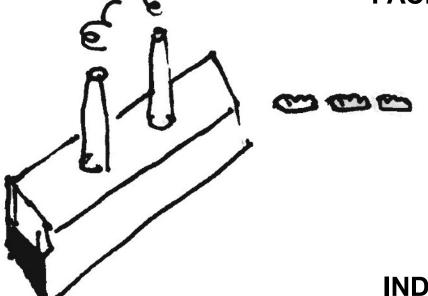






**GRAIN INDUSTRY** 

PACKAGING INDUSTRY



**INDUSTRIAL BAKERY** 

### **ENERGY STORAGE** BBB TREAD MILLS ANIMAL MILLS WIND TURBINE **GRINDERS GRAIN INDUSTRY** 口 WIND MILLS **ELECTRICITY NETWORKS** PACKAGING INDUSTRY WATER MILLS 9 HYDROPOWER PLANTS

**USE OF ENERGY** 

**INDUSTRIAL BAKERY** 

Valentin Bansac Maria Cunha Martin Fröhlich Shehrazade Mahassini Lara Monti Daniela Lopes Peñaloza Vanessa Pointet Clemens Waldhart

food supply. Food, more than any other commodity, carries specific soils, locations, and climates.

Under the title *Domesticated Foodscapes*, the Superstudio profound territorial and social significance. It has shaped explores latent perspectives and proactive approaches landscapes and cities and delivered a multitude of architectural addressing the pressing environmental concerns of our time. typologies rooted in the need to rationalise food. However, Since our transition from hunters and gatherers, we have with the advent of industrialisation, these typologies became continuously modified our environment to ensure a consistent territorially unbound, as technologies detached them from 2023

2024

# SUPERSIUD

Valentin Bansac Maria Cunha Martin Fröhlich Shehrazade Mahassini

Lara Monti Daniela Lopes Peñaloza Vanessa Pointet **Clemens Waldhart** 

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2023 HARVEST STORAGE 2024 DISTRIBUTION CONSUMPTION

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2023 HARVEST STORAGE 2024 DISTRIBUTION CONSUMPTION 2024 Basel

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## SUPERSTUDIO

All students should be critical researchers. Research results are achieved equally through practical experimentation and theoretical investigation.

We work collectively in groups of 5 researchers. We reflect and critique ourselves in public discourses. We will present our results for discussion in a public exhibition at the end.

## RHYTHM

FORUM 1 RESEARCH ROUNDTABLE ROUNDTABLE ROUNDTABLE RESEARCH RESEARCH

FORUM 2 RESEARCH

FORUM 3 RESEARCH RESEARCH CHARETTE EXHIBITION

## FORUMS

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19.09.-20.09. FOCUS
17.10.-18.10. CULTIVATE
14.11.-15.11. COLLECT
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19.12.-20.12. EXHIBITION



# FORUM 1 19.09.-20.09. FOCUS

Carolyn Steel online from FHNW Basel, Symposium FEED THE CITY - Architectures for a sustainable food system

Sébastien Marot, Landscape & Food Sandra Bartoli, Light, air & shit

Charlotte Malterre-Barthes, Territory & Food Politics Martin Fröhlich, Kartoffelstärke

Marina Otero Verzier, Automated Landscapes André Tavares, Fishing Architecture

AND SWISS FARMER & FOOD PRODUCER

## RESEARCH

CULTIVATE is an experimental investigation.

Each group is choosing a specific food and investigate its harvesting and storage techniques. Develop a 1:1 scale model or sculpture to store, grow, or harvest the chosen foods, ensuring it remains eatable by the end of the semester.

## RESEARCH

COLLECT deals with the architecture of harvesting and storing food. The exploration is focused on architectural typologies, unveiling their evolution from historical origins to contemporary designs.

This study decodes the intricate ways in which structures

encapsulate cultural, functional, and spatial adaptations

in response to shifts in environment and society.

## RESEARCH

recorded presentation. This presents and summarizes the key findings of the research and puts it into a perspective by formulating a thesis and possible synergies to the other shared research of the colleagues from CULTIVATE (Forum II) and COLLECT (Forum III).

### MUSHROOM

Category: mushroom
Growing cycle: 21-28 days
Harvest: all year
Native area: Europe, North America,
Asia
Global market value:
50.30 billion USD

They are found in nearly all temperate regions, in forests and orchards, vineyards and pastures, growing wild most freely in the spring and autumn, and they possess a great theoretical interest for many people — with the result that much which is not true has been most impressively written concerning them. First, and most emphatically, mushrooms are not entitled to the pathetic praise, so often bestowed, which describes them as a valuable but neglected food source. Their nutritive value is slight, and unless carefully cooked — and consumed in the greatest moderation— they are liable with many people to retard the assimilation of better foods by their "indigestibility" in the stomach.

The foregoing is the case against the mushroom. With fanciful theories of food value thus set aside, one may proceed with praise for the numerous varieties which please the palate with their unique flavors — to be enjoyed for those flavors rather than for nutrition — and which, furthermore (the best of them free for the gathering), perform also a real service to humanity by adding bulk and substance, even though it be of minor grade, to the diet of hundreds of thousands of people in other parts of the world who are not blessed with the measure of comparative abundance which is, or should be, the heritage of every resident of the North-American continent.

The mushroom is not, as generally understood, the plant, or fungus, itself — it is the fruit of the growth which produces it and which remains underground — a white or bluish mold called mycelium, or "spawn," a network mass of thin, thread-like "roots," or underground stems. The mushroom, or fruit, when mature diffuses a quantity of powdery seeds, or "spores," by means of which the fungus extends its propagation. The distribution of the spores is in most cap types from "gills" on the underside of the cap.

Cultivation is confined almost exclusively to varieties of the Common Mushroom. Spawn, because of its quicker results, is used in preference to spores. It is marketed in both cake and flake forms.

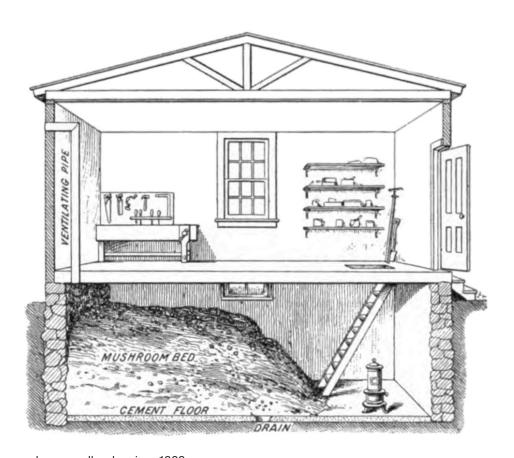
Any place is suitable for cultivation which is moderately cool and moist, uniform in temperature, and away from direct sunlight. A cellar is the best ordinary example, but growing on a large scale is generally done in caves, closed tunnels, abandoned breweries or quarries, or specially constructed "mushroomhouses" — usually wooden buildings partly below and partly above ground. The spawn is planted in beds of mixed manure and earth, with a final covering of the latter. When the crop is well under way, the beds are picked once or twice a day for fruit large enough for market.

All kinds of fungi should be cooked as speedily as possible after gathering — or be promptly dried for future use — as their fine qualities quickly deteriorate.

From The Encyclopedia of Food, Artemas Ward, 1923



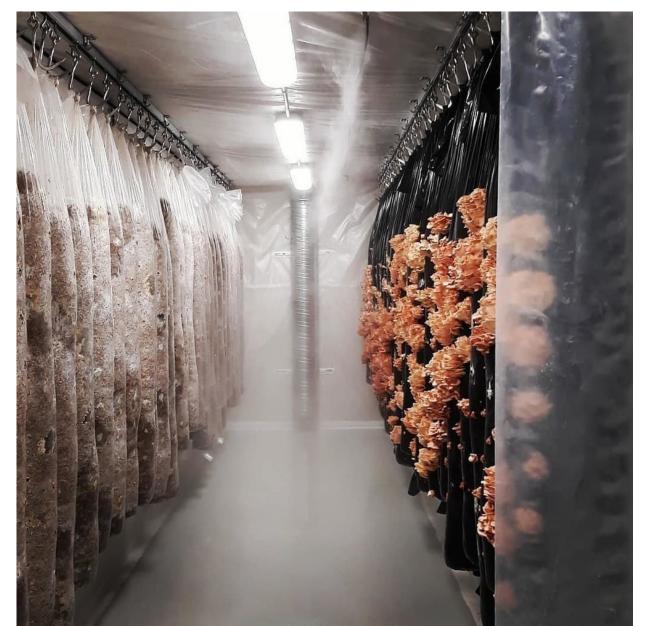
The Encyclopedia of Food, Artemas Ward, 1923

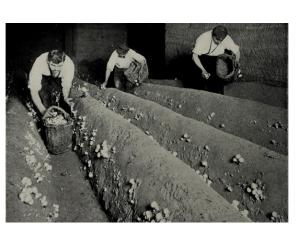


mushroom cellar drawing, 1909

# FOOD TYP ARCHI TECTURE

mushroom vertical production in Canada, 2016





Gathering cultivated common mushrooms, The Encyclopedia of Food, Artemas Ward, 1923

### **PORK**

Category: animal
Growing cycle: 6 to 7 months
Harvest: all year
Native area: Europe and Asia
Global market value:
254.53 billion USD

The title "pork" covers all the flesh, fresh or cured, of pigs, or swine, but in ordinary use it is not applied to the flesh when smoked, as 1 mm and bacon. This is another example of the curious changes that have occurred in the English language, for "bacon" was formerly applied to all meat from the pig, of any part and whether fresh, salted, or smoked!

The back-cut design is almost clear fat and is used for salting and pickling, or "corning." The middle-cut may be converted into bacon or may be salted — it is sometimes termed "lean ends" salt pork. The belly is generally used for bacon. From the ribs and loin (beneath the back-cut) come "spare ribs," eaten both fresh and corned, chops, and "roasting pieces." The tenderloin proper is a comparatively lean and very small strip of meat lying under the bones of the loin and usually weighing a fraction of a pound. A "smoked tenderloin," weighing from 2 to 3 pounds, is the boned neck.

The hams and shoulders are generally cured, but are also sold fresh as "pork steak" and "fresh pork," etc. The shoulder is in the South frequently sold entirely, dry-salted — being then known to many in the trade as the "English shoulder." Throughout other parts of the country it is commonly cut into two parts — the "picnic," or "smoked," shoulder (formerly styled "picnic" or "California" ham) and the "boneless butt" or "regular butt." The "picnic shoulder," plain cured or cured and smoked, is very popular because of its conveniently small size.

The fat trimmed off the hams and shoulders may be rendered for lard or it may go, with all other trimmings, into the manufacture of sausages. The leaf fat which lies around the kidneys furnishes the finest quality lard. "Larding pork" is very fat pork, from the loin and ribs, cured and preserved with ordinary cooking salt.

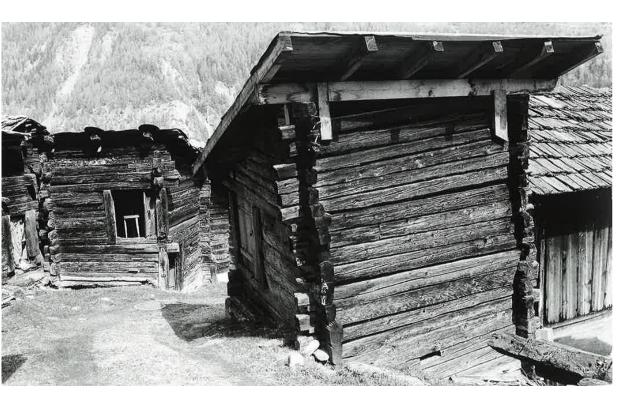
The head, feet, and tails are eaten both fresh and pickled.

The annual consumption of pork is enormous, attributable partly to its high calorie value, and partly to the fact that it lends itself more acceptably to "curing" than any other form of animal food. It is not, though, an especially desirable food for delicate stomachs as the gastric response to it is considerably slower than to beef and similar meats.

The United States is a long way ahead as a pork-producer, consuming a high per capita amount at home and shipping vast quantities to Europe and other parts of the world, both for private consumption and for the commissary departments of armies and navies. Ireland is the next largest producer of cured pork.

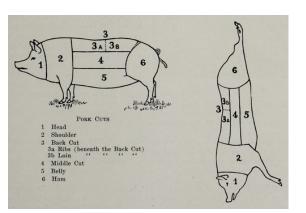
Pork should be smooth and cool to the touch. If it feels clammy and looks flabby, it is old and may not be fresh. If it has many enlarged glands in the fat or fine black spots in the belly strips, it may generally be regarded as from a diseased animal, and therefore unfit for human consumption. It should always be thoroughly cooked before eating.

From The Encyclopedia of Food, Artemas Ward, 1923



Hoghouse in Pinsec, Rural Houses of Valais tome 3.1, 2011

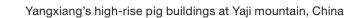
# FOOD TYP ARCHI TECTURE



General division of a pork carcass, The Encyclopedia of Food, Artemas Ward, 1923



A-shaped portable house, Hog-raising in British Columbia, S.H. Hopkins, 1915





### TOMATO

Category: fruit
Flower to fruit cycle: 90-115 days
Harvest: June-October
Native area: Peru and Ecuador
Global market value:
197.76 billion USD

The fruit of a rapid-growing, short-lived, tender annual, native to South America — a sun-loving plant which requires long days of uninterrupted sunshine to develop the best possibilities of its fruit — its choicest flavor and highest color. It was for a long time considered unfit for food, but it is now esteemed as especially wholesome and of high vitamin merit, and is marketed in everincreasing quantities and in numerous forms — fresh, canned, in catchup, etc.

The tomato was cultivated in Mexico and Peru for many centuries prior to the advent of the Spaniards. Several varieties were known in England by the end of the sixteenth century, and Gerard, the surgeon and botanist, speaks of it in his "History of Plants," having himself introduced it as an exotic. Dodoens, the Netherlands herbalist, mentions it as early as 1583 as a vegetable to be eaten with pepper, salt, and oil. Its popular acceptance was, however, slow in arriving, for it is only within the last three generations that it has become a food of general use.

The United States is the greatest per capita consumer. Next comes southern Italy, where it is used in the preparation of, or as an accompaniment to, nearly every dish. Italians call it the "golden apple." It was also formerly known as the "love apple" in France, England, and this country.

In northern Europe the consumption is largely of canned products. The plant is grown in England, but sparingly, as it requires hotbeds in the spring and the fruit is consequently high-priced.

Our northern states grow their own fruits in fields and gardens from June to November. The winter and spring demand is supplied both by the southern states and the West Indies and by the output of localized hothouses. The hothouse crop has increased more than 500% during the last few years.

There are many kinds of tomatoes, ranging from the fancy, generally small, varieties known by their resemblance to other fruits — as the "currant" (a distinct species), acid in flavor, and growing, current-style, in long clusters; the "cherry" or "grape," borne in bunches; and the "pear" — to the many sizes of the ordinary tomato, 'reaching the maximum in the linge "beefsteaks" (which frequently weigh from two to three pounds each) and varying in color from deep red to yellow. The most generally desirable are those smooth and round, of medium size and even color, with thick walls and small seed-cavities.

The small fancy varieties are seldom grown for eating raw, except as curiosities, but they are cultivated to some extent for pickling and preserving.

Green, but firm and well grown, tomatoes, gathered just before frost, can be ripened in a dry cellar for winter use. They should be wiped dry and placed on racks, the latter preferably straw-covered. Any that show signs of decay during the ripening must be at once removed before the trouble spreads. They will not attain the full color or fine quality of the fruit ripened on the vine, but they are thoroughly wholesome.

From The Encyclopedia of Food, Artemas Ward, 1923



The Encyclopedia of Food, Artemas Ward, 1923



The Greenhouse Series in Almeria, Spain, Tom Hegen, 2021

#### The Future of Farming in the Netherlands, Luca Locatelli, 2020





The Future of Farming in the Netherlands, Luca Locatelli, 2020

# FOOD TYP ARCHI TECTURE

### WHEAT

Category: grain
Growing cycle: 60-150 days
Harvest: June-August
Native area: Fertile Crescent
Global market value:
161.12 billion USD

The human food-grain is preeminent in other than Asiatic countries. It owes its high position to the excellence of its flour for bread-making — it yields bread more generally acceptable than that of any other grain — bread that is attractive in appearance, particularly well leavened, and pleasantly mild in flavor. Its leavening quality is due to its comparatively large content of gliadin. Its composition is about 69% carbohydrates (chiefly starch in a form which is easily and efficiently assimilated), 11% protein, 1% fat, 1.7% ash, 2.6% cellulose, and 14.5% water.

Wheat has been cultivated since the earliest ages — it was the main crop in ancient Egypt and Palestine and formed part of the food supply of the prehistoric Swiss cave dwellers. To-day, the United States produces and consumes a greater quantity than any other country in the world. Russia in normal times stands next in the list of producers.

The plant is a slender grass of varying height, annual or biennial, flourishing in sub-tropical regions yet capable of enduring the unusually severe winters so often experienced in northern Europe and the northwestern part of this continent. It requires, however, a mean temperature of at least 55° Fahr, for three or four months of the year.

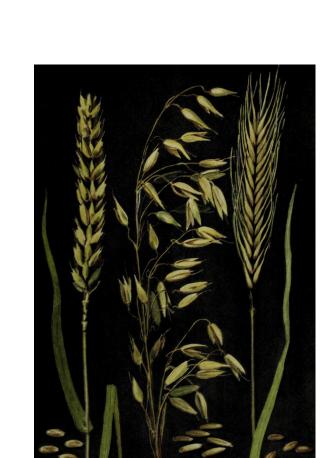
Owing to the different climates in which it is produced, the cultivated varieties are very numerous and new kinds are continually presenting themselves, many of which are held in high estimation in certain districts. The chief types are known as Soft, Semi-hard, Hard, and Durum (or "macaroni"), the last-named being the hardest of the hard wheats.

The hard wheat — the great grains of Minnesota and our other west-north central states — are of varieties brought from the rich grain districts of the south and east of Russia. They are heavy with gluten and yield creamy-colored flour. The soft wheats (those chiefly grown in our other states) contain less gluten and give whiter flour. Other classifications are into Bearded and Unbearded, Red and White, Spring and Winter, etc. Durum wheat — highly valued for its drought and rust resistance — is generally so heavily bearded that the seed-head looks much like barley. "Winter wheats" are those which are seeded in the fall and therefore carry a partly developed root-system through the winter.

The grain consists essentially of a starchy kernel — composed of minute cells containing the glutenous protein and the preponderant starch granules — wrapped in five coats, or layers, which constitute the bran. The three thin outside layers are called the "skin"; the fourth, known as the "testa," contains the greater part of the coloring matter. These four outer-coats together constitute about 5% of the weight of the whole grain. They consist chiefly of cellulose and mineral matter. The fifth inner, and thickest, coat (constituting about 8% of the weight of the grain) is known as the "cereal," or "aleurone," layer. It consists of cells full of protein. The varying proportions in which the bran is included in the flour represent the differences in Graham, or whole wheat, and other related flours and breads. The grain also carries a fatty germ but this does not ordinarily reach the consumer in either his flour or bread.

Because of its importance for food purposes, wheat has attained great prominence in the political and commercial worlds. In the former, it has held the reins of power, created parties, developed partisanship, and decided the issues of parliamentary and congressional strife. In the latter, it has proved an attractive source of speculation and an objective point for financial ambition. It has been the competitor of gold in the race for gain, and has given and removed fortunes in a day. Corners have been created and ruin forced almost in the twinkling of an eye by speculative battles for the control of its supply.

From The Encyclopedia of Food, Artemas Ward, 1923



The Encyclopedia of Food, Artemas Ward, 1923



Increasing the yield is the main goal, propaganda in USSR, 1952

# FOOD TYP ARCHI TECTURE

#### Tabalak, traditional wheat silo in Niger





wheat silo





# SUPER

short end





