
Building futures with cities
EPFL-ENAC
Visiting Studio Spring 2020-21
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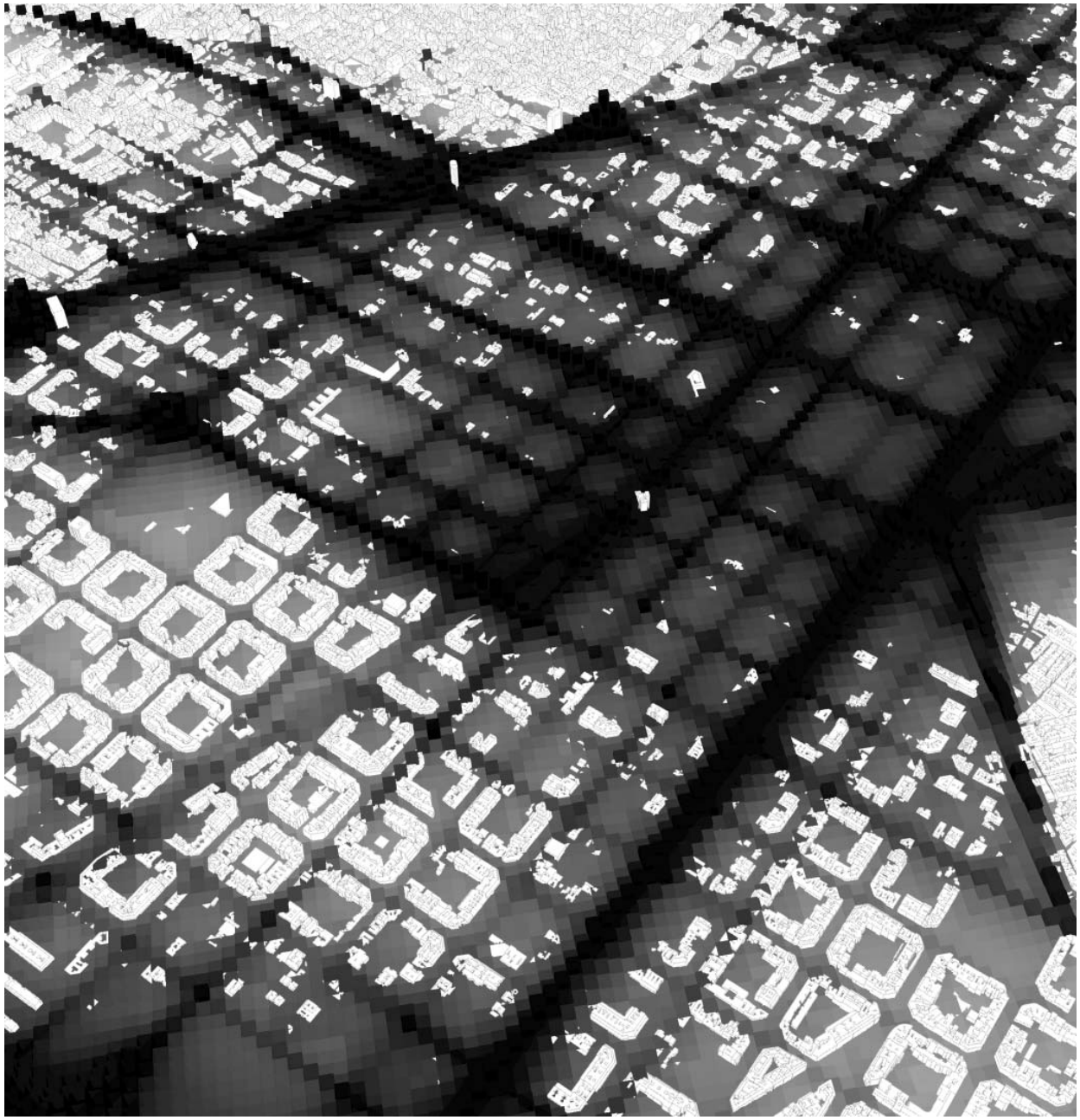


Brief

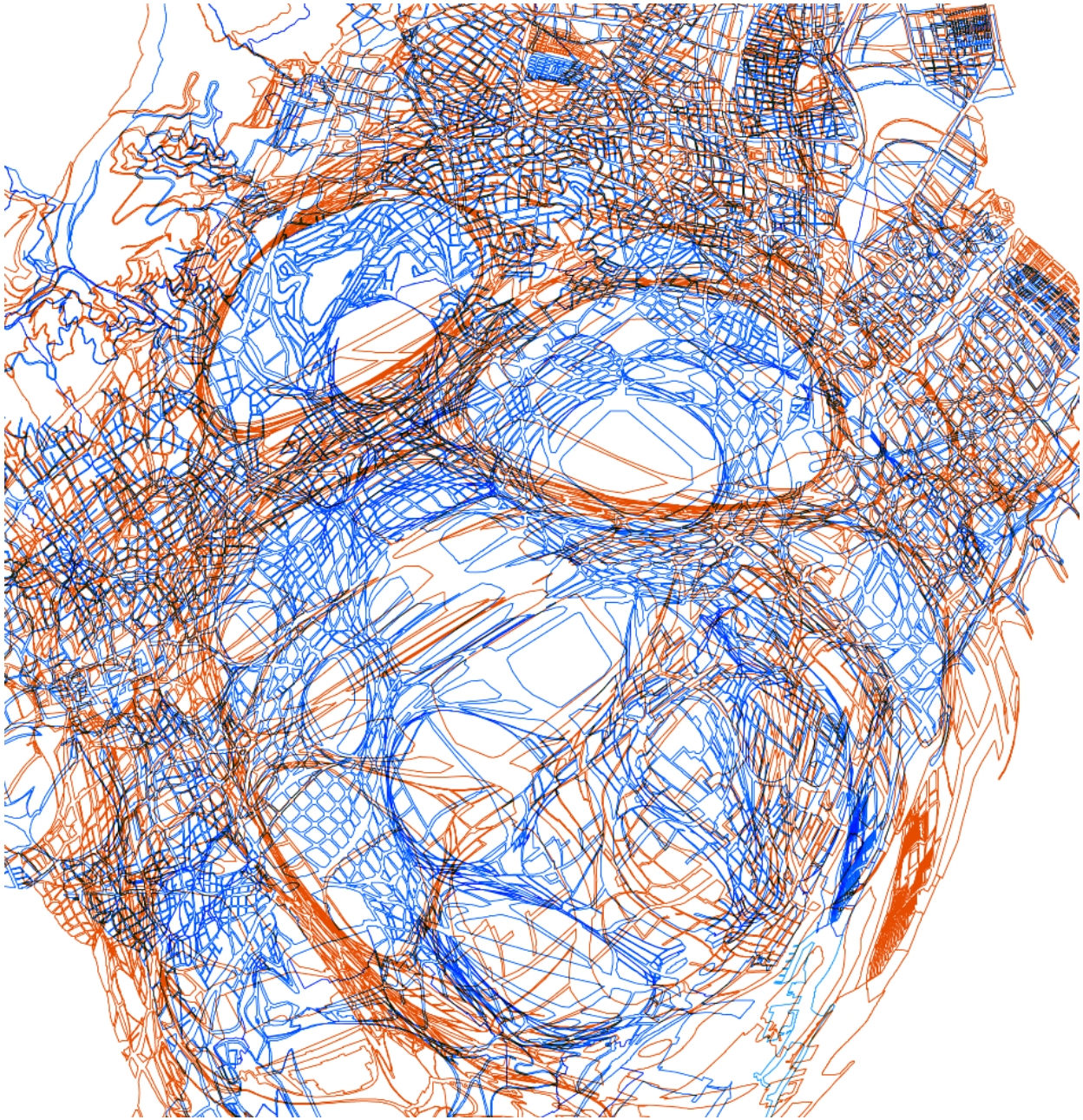
It is urgent to approach the planning of cities under a radical vision of the future, that faces the short and long-term transformations needed to preserve the habitability of our planet. We must look at cities as survival strategies putting together collective interests and needs. Cities are not the problem but the solution.

The concentration of population and the consumption of energy, goods and food in urban areas means that cities are the places where the challenge of collective survival can be addressed - while configuring the resulting social order governing our lives.

Contemporary socio-economic disruptions arising from the digital transformation have dissolved the hierarchies imposed by space, challenging us to understand how they invalidate previous urban regulations and their implicit social pacts.

Again, we must look at cities and redraw them in order to understand the origin and effects of these profound transformations. We need to expand the field of action of urban planning under the perspective of health, well-being, urban quality, prosperity, climate change and governance.

During the visiting studio, we will explore several scenarios of urban transformation based on a **vocabulary of futures to rethink cities along with the disciplines and tools that ultimately shape them.**

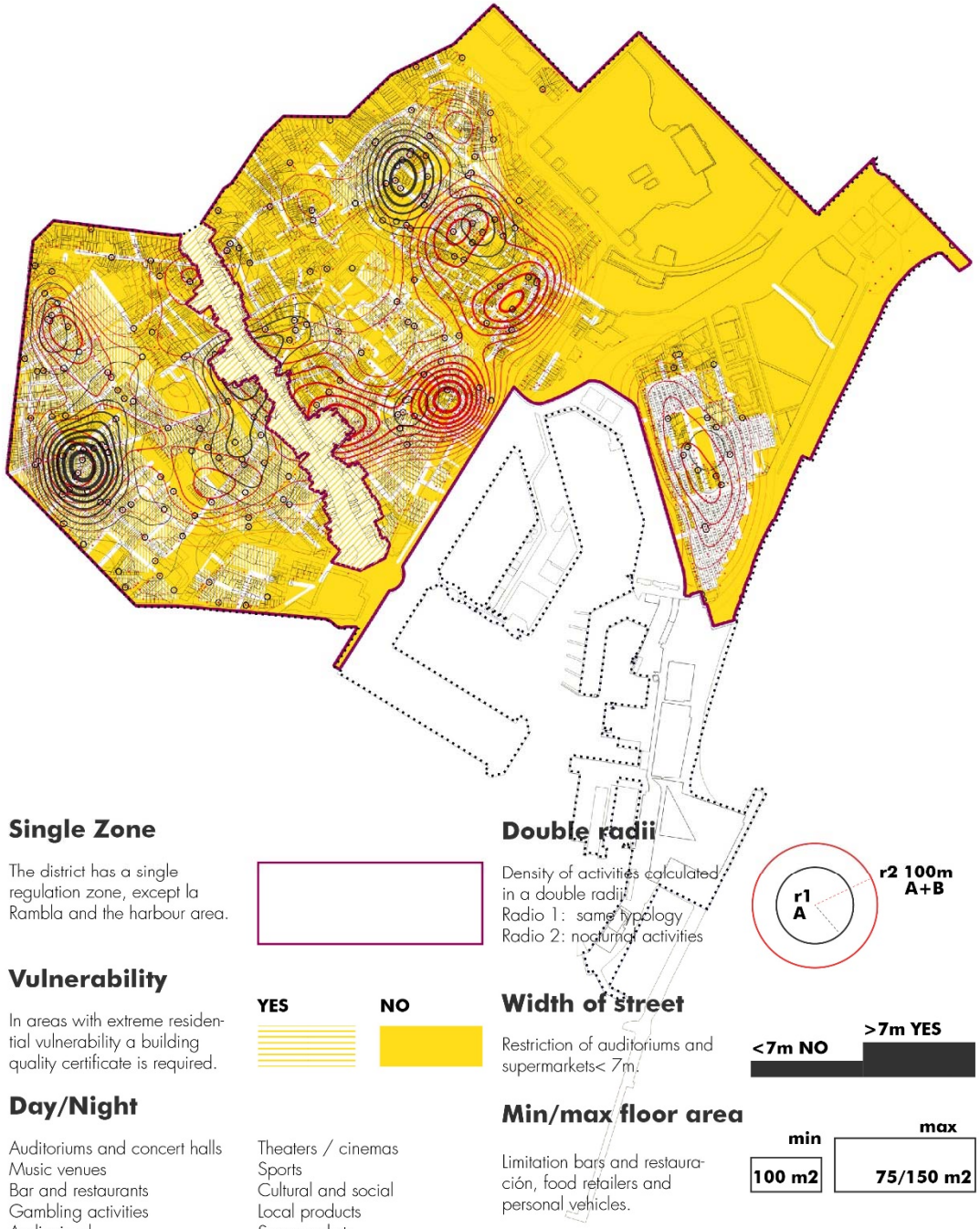


The 2 cities

The **built city** is slowly erected and transformed. Today, many European cities have reached a permanent urban form, far from the unstoppable expansion of the last decades. However, streets, squares, parks and built space are also the background of another city, the **lived city,** a synthesis of a collective way of living that constantly changes.

If over the centuries the existing technologies have focused on the physical transformation of the environment (through the construction of buildings, roads, aqueducts, etc.), today the so-called digital technologies of computation, sensorization and communication act directly on the lived city. They disregard the direct morphological transformation of the environment and disrupt the tools and infrastructures that strengthen relationships, agreements and economic forces.

The Visiting Studio will explore how these same technologies - that produce the city- generate major changes in the physical organization of uses, housing, mobility, labour and governance.



An informed planning

Today, a new information ecosystem is available (open data from public bodies and big data generated by the use of information technologies) to generate complex diagnoses and inform urban planning. Furthermore, quantitative data must be complemented with qualitative visions of the city co-produced and supervised by citizens.

A new urban infrastructure

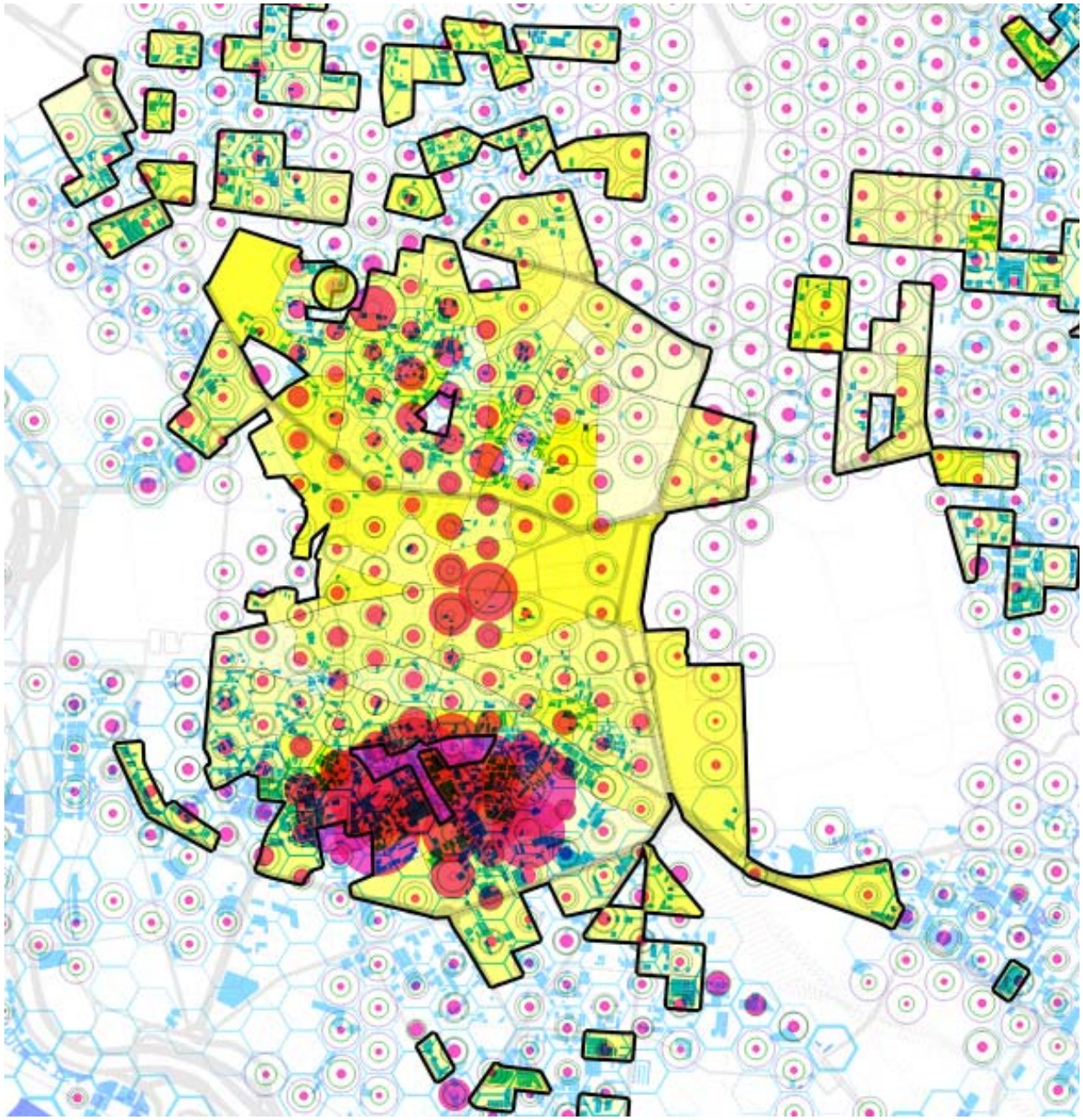
Public leadership ensures that urban planning is based on transparency and digital sovereignty. We must avoid the creation of information gaps (as many urban issues have yet to be digitized) while ensuring that data infrastructures remain public and they are not dominated by big tech corporations operating in cities.

Co-producing the city

Urban visions must be built upon external disruptions (cultural, environmental and technological) while, at the same time, they should include the perspective of inhabitants. They can contribute in the different steps of the planning process (from diagnosis to the final proposal), developing and making future visions alive.

Scales and modes of intervention

We propose complex ways of intervening in the city: from diagnosis and planning to other strategies (including management and evaluation of results). We need to find novel tools (from the public policy to the app) to measure, analyze, design and readjust.



Method

The students will work with different tools that will allow them to analyze and extract meaningful information from large amounts of urban data. We will address the process of capturing and interpreting information to develop a research and a project that responds to the identified challenges.

Concepts:

– Gathering information (digital acquisition).
– Working and analyzing with databases.
– Cartographical representation (using GIS systems).
– Spatial and temporal aggregation.
– Mathematical analysis vs graphical analysis.
– Identification of patterns vs exception.
– Mash-up and complementary data
– On-site verification and reinterpretation

Outputs:

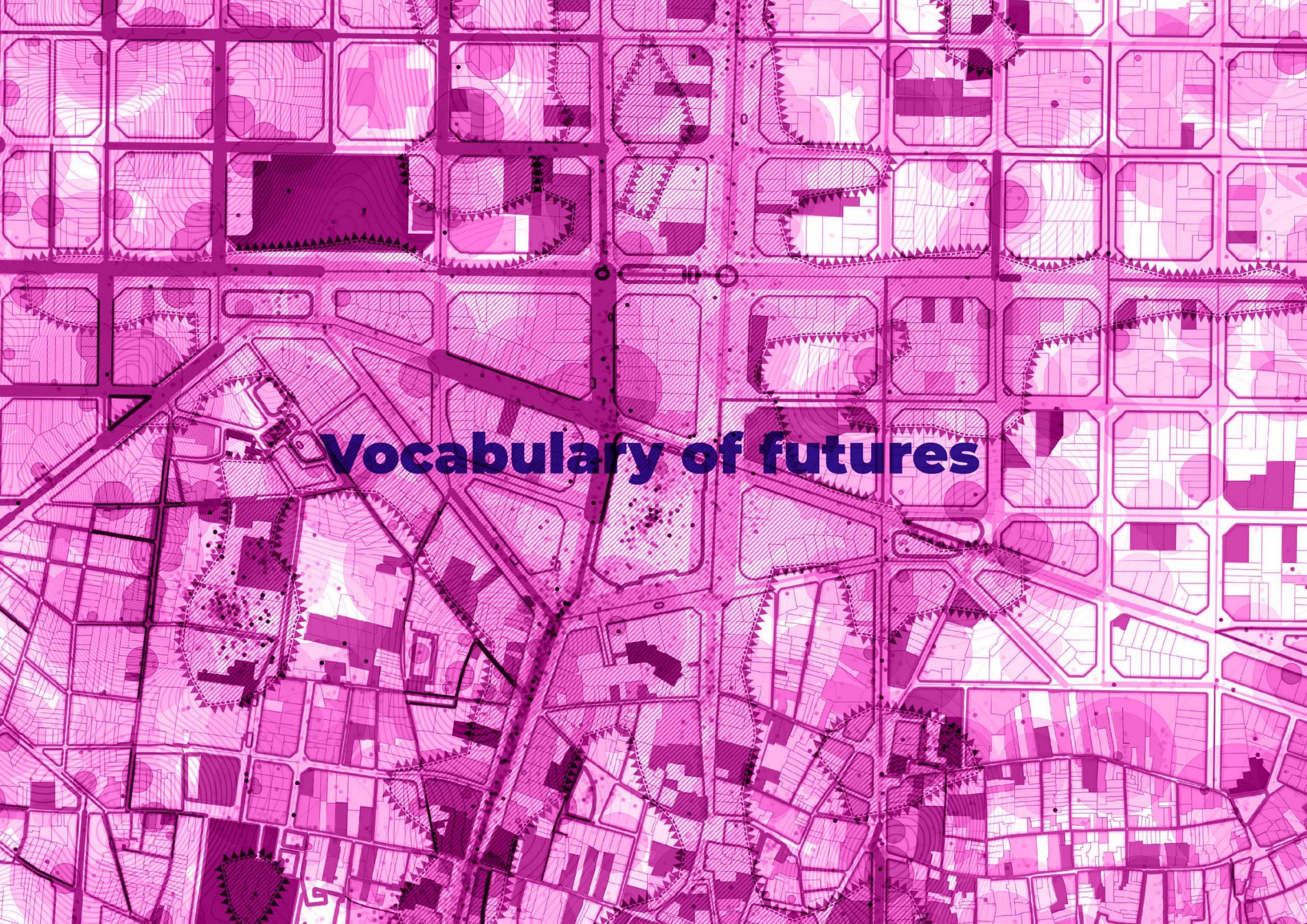
- Research on a selected topic
- Cartographic series
- Multiple scale and format proposal (urban project, urban planning, building, management system, public policy, urban technology, etc.)

Site:

The unit will be deployed in a Swiss city (to be provided at the beginning of the semester) as a case study.

Recommended courses:

Cartography unit


Vocabulary of futures

Population in motion

In the lived city, different populations live together overlapping in time. Cities rely on a critical mass of residents that grows on a daily basis balanced by workers (commuting from the outskirts) and visitors. Specially, tourists and business travelers can exceed the number of inhabitants despite living anonymously in the city for short periods of time.

Territories without distances

The high connectivity between territories (accelerated by the low cost of flights and other transportation modes) has generated a competition for land that goes beyond the scale of the neighborhood to be played between connected metropolises. It causes migrations (related to the displacement of the workplaces) and residential movements forced by processes of gentrification and talent attraction.

The dimensions of the urban fabric

The massive movement of tourists around the world promoted by low cost airlines and the short-term rental via collaborative platforms (which facilitated the global appearance of peer to peer apartments) has caused a huge disruption in the housing market resulting in the displacement of local population. To prevent the touristification of cities, urban planning needs to address the different scales of this problem (changing from a land-based approach to regulating beds and rooms) originated on an international level.

Spaces of opportunity

The mobility generated by work and housing needs to be approached with a future-minded approach. Today, we are entering a crucial transitional phase. The disappearance of the private vehicle (as a result of mobility as a service options) linked to the improvement of the public transport (network, frequency and intermodality) will lead us to reduce the spaces currently used for traffic and individual parking (transforming them into other uses of added value for the city) in favour of new spaces for intermodality and sharing systems.

Reorganising the urban mix

We have an opportunity to create environments where the low dependence on the private vehicle generates a strategic advantage -fostering the transition towards the total reduction of fossil fuels. Urban planning must forge conscious links with mobility strategies by providing access to the basic social functions of a city and promoting proximity as the key for a vital environment. As a result of this novel paradigm, the city becomes an infrastructure that promotes healthy lifestyle habits and generates collective well-being.

The relocation of goods

Mobility is changing from transporting people to moving goods. The progressive delocalisation of production and storage has generated intense internal logistics flows, amplified with the irruption of e-commerce. Urban freight logistics needs to be rethinked. So far, last-mile delivery was a characteristic challenge of productive areas (commerce and offices). Today, residential fabrics must provide the necessary spaces for freight consolidation centers that generate a positive reduction of traffic and emissions.

The granularity of workspaces

With the penetration of digitization in the production, we are consolidating the already announced decentralization of the workplace, but also its diversification in multiple nodes. The labour ecosystem looks for central areas to locate the headquarters and representative offices as well as shared work spaces to include both remote workers and foster business and companies in their early stages of growth. Working from home has also become a pressing reality.

Urban fabric as a mediator/facilitator

In a context of crisis of the idea of density (the concentration of activity generates higher mobility and environmental pollution), it is necessary to create new centers of interest distributed throughout the territory especially in those sectors that provide added value, work quality and urban transfer.

The dissolution of the ground floor

Commercial plays a fundamental role in shaping the urban image, ensuring walkability and providing a social control of the public space. It provides residents and visitors with goods and services, while providing jobs for a significant portion of the working population. They also end up becoming a driving force for development (generating benefits at an individual and collective level) and they create a feeling of belonging among residents in many urban areas. The transition from product trade to service acquisition, along with the emergence of e-commerce and the visitor economy, is transforming the ground floor of many cities and challenging an urban model based on diversity and proximity.

New forms of precariousness

The transformation of economic relations has increased social precariousness. From the self-employed 'riders' who deliver food at home to the 'hosts' of tourist apartments who live daily with strangers without intimacy or privacy. Each new ‘success' of the economy implies, at the same time, a vulnerability of the social pacts.

Prioritize life on earth

We are not yet able to understand the consequences of urbanization. We are in a globalized world, governed by resource-extracting cities that generate migrations and epidemics and are the centers of inhuman poverty and obscene wealth.

Despite the fact that climate change impacts seem far away (in time and space), we are already experiencing its direct consequences in urban environments in the form of a public health crisis. The climate crisis on a global scale is now a public health crisis on a local level.

Our health, as we have sadly learned with the outbreak of recent pandemics -but also with great contemporary chronic illnesses such as air pollution, noise caused by excessive activity or sedentary lifestyle- will depend on the quality of our close urban environment. We must build cities to become organizations for collective health, overcoming individual approaches to habitability.