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SYLLABUS

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1. PURPOSE AND DELIVERABLES

The purpose of the studio is to address these questions:
1. How can urban design and planning foster wellbeing?
2. Can we, through design thinking, deliver solutions - designs, policies, tools,...to promote healthier individuals and healthier communities?
3. Can we rethink the urban environment for improving wellbeing and enhance local social sustainability?

Using as case study the building of the "Conjunto Residencial Prefeito Mendes de Moraes" (1947), built in Rio de Janeiro and commonly known as Pedregulho, we will explore its public spaces and envision design strategies and solutions to create and enhance collective intelligence processes that can be exported to similar contexts throughout the city and the country.

Major topics to be addressed include:
Connectivity (transportation, walkability, technology,...)
Landscape (biodiversity, resilience, productive landscape,...)
Environment (air quality, water, waste, acoustics...)
Physical configuration (land use, materiality, design,...)
Human scale **(**physical activity, food, social connectedness, climatic comfort,...)

All these elements condition our life as individuals and the life of the community. Taking these into account, the redesign of collective spaces becomes an interesting field for experimentation, which allows the exploration of new urban scenarios and solutions to effectively create the conditions for healthier living, both at individual and community levels.

Learning outcomes:
1. Understand and reconsider community spaces and their social dynamics, in order to facilitate and promote healthier living conditions.
2. Use design thinking methodology to bring interdisciplinary problem solving to the forefront by working to solve real-world problems.
3. Synthesize ideas and proposals beyond the use of the conventional planning communication tools, incorporating other media and exploring new ways of presenting and communicating ideas.

Deliverables:
1. Studio report - Guidelines for a healthier urban environment in Pedregulho. Identification of effective strategies that are locally relevant and globally scalable.
2. Work in progress deliverables (see methodology outcomes).

2. BACKGROUND

Cities - living laboratories

Cities are the greatest examples of human invention: As dense agglomerations of humanity, they are the places where innovation and creativity are concentrated. They have evolved into incredibly complex systems in which the interaction between people, nature, and the built environment is constantly being negotiated and renegotiated. The city has to be viewed as a metabolic and ecological system in its own right and therefore as a vibrant and increasingly dominant part of the natural world we inhabit.

Urbanism is the mirror in which the many aspects and layers of society are reflected. Cities were first developed to support basic human activities, but have gradually transformed into complex, evolving, living laboratories, where socio-environmental relations are currently being redefined. In this context, and with over half of the world's population now living in urban areas, it has become clear that there can be no single solution to environmental, social, or economic challenges. Moreover, it is necessary to work on a variety of aspects of city life simultaneously. The multilayered contemporary experience demands a more holistic approach to designing cities.

Health - holistic approach to Urbanism

It has become clear that the built environment can make us sick. In recent years the scope of the investigation shifted from focusing exclusively in the body towards taking into account the room, the house, the street... the city. If we believe architecture and urban planning can make us healthy and that every aspect of urban design has an impact in our daily life and wellbeing, the challenge is to identify the tools and initiatives that make a positive impact possible.

Public space

Public space is where most links and social intersections take place, being responsible for the majority of interactions and random phenomena. A lively public space is a complex balance of overlapping layers which should respond to the demands, desires and expectations of a plural society, providing the conditions for a more inclusive and healthier social life.

Rio de Janeiro - Prefeito Mendes de Moraes housing complex

In order to start defining strategies and testing ideas, we are going to work in the context of Rio de Janeiro, a city with a metropolitan area of 12 million inhabitants.

We will particularly focus in the housing complex "Conjunto Residencial Prefeito Mendes de Moraes", known as Pedregulho, an ambitious project design by Affonso Eduardo Reidy in 1947, originally built for public servants, that addressed collective living, social housing and public health in an innovative way incorporating features which made the complex an outstanding and conceptually significant project.

Pedregulho has 328 housing units and 1.700 inhabitants. Housing units are between 30 and 80 sqm large. The complex incorporates different common areas and public programs in addition to housing, becoming a living ecosystem: Primary School, Sports Hall, Swimming pool, Sports field, Health Centre, Laundry, Market, playgrounds and Kindergarten, all surrounded by a natural landscape.

The building was conceived to efficiently respond to the local climatic conditions, having a bioclimatic design and incorporating the landscape and the views as integral parts of the design, in order to improve the wellbeing of the inhabitants. It also includes a significant common space. This space has been customized allowing different activities to take place, and becoming a characteristic feature of the building and its community living.

Social housing - worldwide case studies

Pedregulho is based on previous experiments, around the topic of social housing. These projects tested different ways of combining and balancing private and common space. The master plan for Rio de Janeiro by Le Corbusier in 1929, the Narkomfin built in 1930 in Moscow, the Karl Marx Hof in Vienna also from 1930 or the Unité d'Habitation in Marseille, a housing concept designed by Le Corbusier years before, but implemented at the same time than Pedregulho.

Later on, during the 60s and 70s, the utopia of collective housing was materialised in different contexts: Brazil, United Kingdom, Spain, France, Italy, United States, Switzerland, etc. Adapting the same conceptual framework to the particular local conditions.

This urban utopia approached collective housing always incorporating the concept of common living space and the idea of "streets in the sky". The aim to improve the living conditions was always there, but the designer invariably would impose a top-down scheme. There was also a fascination for the scale of infrastructures imposed over the human scale, being one example of this the Gavea housing complex, a sequel of Pedregulho built by the same architect, and also located in Rio, which places itself on top of a highway, becoming part of the infrastructure.

Pedregulho housing complex today

At Pedregulho, and in contrast with top-down solutions, the customization of everyday life space and the bottom up initiatives that emerge from the collective intelligence help to shape the social and cultural value of the building. Common areas are in constant transformation to better respond to residents' needs.

However there is a vast number of preceding projects, many of which failed or are obsolete and deprived today. The concept of 'streets in the sky', which once was appealing did not succeed in many cases, questioning its appropriateness and challenging its functionality.

Pedregulho has recently been renovated, between 2010-15. This transformation has improved the physical conditions and the quality of the construction, but at the same time, has increased dramatically the value of the properties exposing the building to a potential gentrification process. This would lead to a shift in the socioeconomic structure of its occupants, also affecting the neighbor areas, what will have unexpected consequences in the near future.

Pedregulho's common spaces add up qualities and possibilities of use and enjoyment to its residents providing healthy opportunities to relax, practice sport, socialize or being outdoors.

3. METHODOLOGY AND TIMELINE

Methodology:

01 Framework + Contact
Brief: Introduction to the framework of the course. Getting to know each other

02 Explore
Brief: Research. Identification of topics of interest. Bibliography.
Outcome: ppt
Organization: individual work

03 Research
Brief: State of the art. Acquiring knowledge about the topic
Outcome: report + video
Organization: teamwork

04 Development A
Brief: Proposal conceptualization and definition
Outcome: mid term review preparation
Organization: teamwork

05 Mid Term Review
Brief: Public presentation of proposals
Outcome: ppt + video
Organization: teamwork

06 Feedback
Brief: Studio Trip to Rio de Janeiro. Fieldwork: collecting data, getting feedback
Outcome: field trip logbook
Organization: teamwork

07 Development B
Brief: Further definition of proposals
Outcome: work in progress
Organization: teamwork

08 Focus
Brief: In depth development of an aspect of the proposal
Outcome: work in progress
Organization: individual work

09 Communicate
Brief: Production of Studio report - Guidelines for a healthier urban environment in Pedregulho.
Outcome: Studio report + Final review preparation
Organization: individual + teamwork

10 Final Review
Brief: Public presentation of proposals
Outcome: Studio report + ppt + video
Organization: individual + teamwork

Grading:
Proactivity will positively influence the final grading.
The process is considered as important as the final results, for which students are expected to register the development and progress of their work and share it throughout the different sessions.

Timeline:
week 01 - january 20	Framework + Contact
week 02 - january 27	Explore
week 03 - february 03	Research
week 04 - february 10	Research
week 05 - february 17	Development A
week 06 - february 24	Development A
week 07 - march 03	**Mid Term Review**
week 08	Feedback: Studio Trip to Rio de Janeiro
week 09	Spring Break
week 10 - march 24	Development B
week 11 - march 31	Development B
week 12 - april 07	Focus
week 13 - april 14	Focus
week 14 - april 21	Communicate
Week 15 - april 28	Communicate
week 16 - may 3	**Final Review**

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